



*The Official Journal of the Foundation For Amateur Radio, Inc.*

**APRIL 1996**

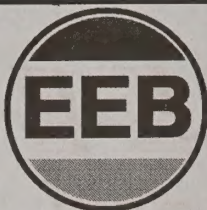


**FCC Highlights • ARRL Report • VE Exams Schedule  
Public Service Report • DX Column • Regional Hamfests  
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# the NEW EEB

## HAMGRAM/ INSIDER NEWSLETTER

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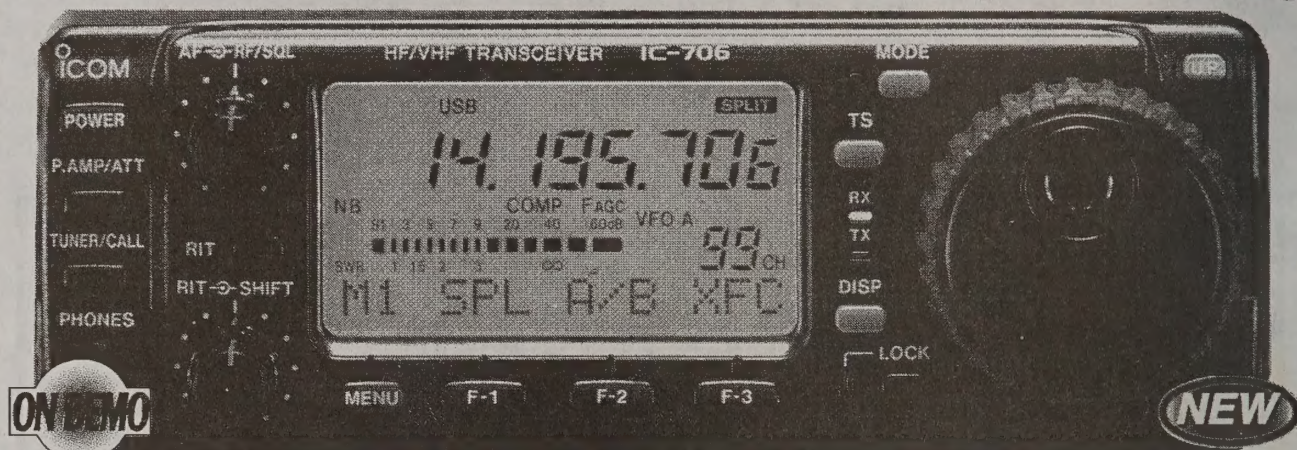
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If you didn't get our Dec. '95 Newsletter, Call-FAX-BBS, even mail to get on our mailing list.

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**ALL HF & 6 mt 100 watts 2 mt ALL MODE 10w**

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**starting at \$249.95**



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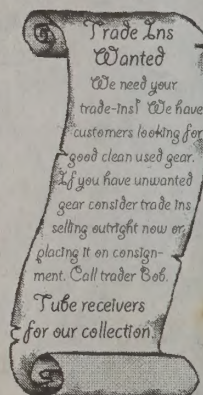
Ask Allen! He Loves His!!

See it to believe it!

**C508A ONLY \$289.95**

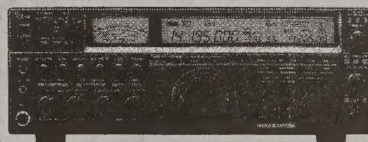
**GOT TO SEE IT TO BELIEVE IT**

**ON DEMO**



### ICOM 775 DSP

The ultimate rig 200 watts analog or digital Rx Tx, antenna tuner, & 120V AC power. Treat yourself to the finest transceiver radio ever built!



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**NEW**

### STANDARD C1208DA 2 mt

2 mt 50 watt speaker mic control, put rig under seat or in the trunk. Cap/ Mars Yes.

Rec 100-200/ 250-520

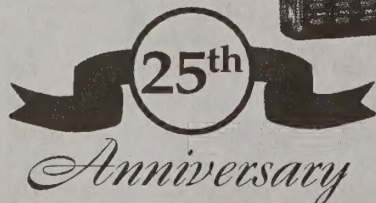
MHz. Has 50, 10 or 3 watts output. Packet ready 9600 baud.

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**ON DEMO**



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## *In this month's issue . . .*

### **Regular & Special Features:**

Editor's Corner . . . . .	5	Dept. of State/Voice of America . . . . .	34
Member Clubs . . . . .	6	Digital Mid-Atlantic Radio Council . . . . .	35
FCC Highlights . . . . .	7	Fauquier Amateur Radio Association . . . . .	36
ARRL Report . . . . .	9	Green Mountain Repeater Association . . . . .	36
Elmer's Corner . . . . .	12	Historical Electronics Museum ARC . . . . .	37
DX DX DX . . . . .	13	Laurel Amateur Radio Club . . . . .	38
Traffic Fun . . . . .	15	MADRAS . . . . .	39
Winning QSO Parties . . . . .	17	Metrovision Amateur TV Club . . . . .	39
FAR Scholarships announcement . . . . .	19	Mid-Atlantic DX and Repeater Assn. . . . .	40
Amateur Radio Training . . . . .	20	Mount Vernon Amateur Radio Club . . . . .	41
Class Announcements . . . . .	21	National Capitol DX Association . . . . .	42
Examination Schedules . . . . .	22	Northern Virginia FM Association . . . . .	43
Shack Sales . . . . .	51	Prince George's Wireless Association . . . . .	44
Auto Call Production Policy . . . . .	54	Southern Maryland Amateur Radio Club . . . . .	44
<b>Club Columns:</b>		St. Mary's County Amateur Radio Assn. . . . .	45
Antietam Radio Association . . . . .	31	T-MARC . . . . .	46
Baltimore Amateur Radio Club . . . . .	32	Vienna Wireless Society . . . . .	47
Capital City Amateur Radio Society . . . . .	33	Washington Area Young Ladies ARL . . . . .	48
Central Maryland Amateur Radio Club . . . . .	33	Woodbridge Wireless, Inc. . . . .	48

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# Regional Hamfests and Other Events

April 13	Appalachian ARG - Fredericksburg, PA
April 13	S.M.A.R.T. 4th annual Swapfest 96, Goochland, VA
April 21	Penn-Del RC - New Castle, DE
April 27	Liverpool ARC - Syracuse, NY
May 4	Kent Island Hamfest, Kent Island, MD
May 4	Southern Tier ARC & Binghamton ARA - Owego, NY
May 5	The Great Hagerstown Hamfest, Hagerstown, MD
May 5	Warminster ARC - Wrightstown, PA
May 18	Ephrata ARS - Ephrata, PA
May 31 - June 2	Rochester Hamfest - Rochester, NY
May 31 - June 1	Atlantic Division Convention - Rochester, NY
June 2	Breezeshooters - Butler, PA
June 8	Champlain Valley ARC, Plattsburgh, NY
June 9	Central PA - Winfield, PA
June 9	Lancaster ARC - Darien Center, NY
June 9	Hanover Hamming Assn - Hanover, PA
June 15	Skyline ARC - Cortland, NY
June 16	Frederick Father's Day Hamfest, Frederick, MD
July 4	Harrisburg RAC - Bressler, PA
July 7	Murgas Amateur Radio Club, Dallas, PA
July 13	Columbia Area ARC - Lancaster, PA
July 14	Mid-Atlantic Amateur Radio Club, Kimberton, PA
July 14	North Hills ARC - Pittsburgh, PA
July 20	Jonestown Mtn Repeater Assn
July 20	Utica ARC - Frankfort, NY
July 21	Indiana County Amateur Radio Club, Indiana, PA
July 27	Columbia Montour Amateur Radio Club, Eerwick, PA
July 28	BRATS - Timonium, MD
July 28	Genesee RA - Batavia, NY
August 4	Delaware-Lehigh ARC - Easton, PA



(Photo by Jim Wilson, K4BAV)

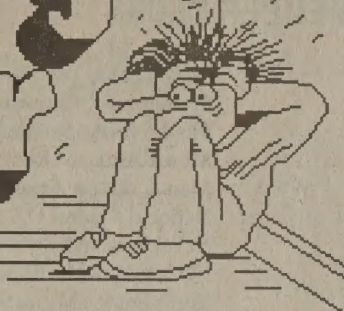
## On The Cover

Operating from the grounds of the Mount Vernon Estate, Luis Villalobos, KP4ZX and Julie Abrams, KD4WSZ work 80 meter phone during a special event station hosted by the Mount Vernon Amateur Radio Club. The special event station was operated February 17th and 18th in celebration of George Washington's 264th birthday. Luis and Julie are both members of the Mt. Vernon Amateur Radio Club. Luis is also the vice president of the Mt. Vernon club.



# Editor's Corner

By John Queen  
KAØSEY



Just before this issue went to press, I was informed by several confidential sources within the FCC that a new class of amateur radio license has been proposed. Issued as a Notice of Proposed Rulemaking (docket number 96-0401), the FCC has proposed an "Amateur Ultra" license class.

The FCC's proposal was prompted, in part, from petitions received from thousands of Amateur Extra class radio operators complaining of stagnation and zero advancement potential since climbing to the top of the existing amateur ranks.

The FCC promises that the new Amateur Ultra class will be limited only to the top 1% of all licensed operators. Stressing rigorous examination elements, the FCC has indicated that Amateur Ultra class applicants must receive Morse code at not less than 35 words per minute, transmit code at not less than 50 words per minute, and strive whenever possible to work only Novice and Technician+ stations on the CW bands. In addition, Amateur Ultras will be required to undergo a written examination consisting of 750 questions. The written exam will cover very advanced amateur radio topics such as designing and building space satellites from scratch, measuring RF energy with only a spoon, and reciting from memory the entire international call sign prefix list.

As an incentive to upgrading, the FCC has proposed that Amateur Ultras receive all existing Extra class operating privileges, plus privileges on the following band segments: 3.000 to 3.500 MHz

on the 80 meter band (all modes), 7.300 to 7.500 MHz on the 40 meter band (all modes), 88.1 to 89.3 MHz on the commercial FM band (phone only), and 482.00 to 485.00 MHz on UHF television channel 22 (all modes).

Amateur Ultras will be issued 1X1 calls. When all calls have been exhausted from this series, the FCC will allow new applicants to be tested only through attrition or substantial bribery. Station and operating licenses proposed by the FCC for Amateur Ultras will be printed on micro-thin sheets of platinum embossed in 14K gold ink.

Under the new proposal, the United Nations working in cooperation with the IARU, would create twenty-five small island countries and populate each with one native amateur radio operator. Newly upgraded Amateur Ultras would then have exclusive rights to work these new countries since they have already worked every country known to mankind.

In a related story, the FCC has also proposed an additional license class to recruit new applicants into the ranks of ham radio. Called the "Novice Apprentice" class, applicants must be able to spell "Morse" and know only that "10-4 good buddy" is not used in ham radio.

The FCC expects to make a decision on both proposals at exactly 12 noon (EST) on April 1st.

73's, de KAØSEY, John



# The Foundation For Amateur Radio, Inc.



Washington, DC

## MEMBER CLUBS

Adams County Amateur Radio Society  
Alexandria Radio Club  
Amateur Radio Research and Develop. Corp.  
AMSAT - Radio Amateur Satellite Corporation  
Anne Arundel Radio Club  
Antietam Radio Association, Inc.  
ARINC Amateur Radio Club  
Arlington Amateur Radio Club  
Baltimore Amateur Radio Club  
Baltimore Radio Amateur Television Society  
Capital City Amateur Radio Society  
Capital Hill Amateur Radio Society  
Carroll County Amateur Radio Club  
Central Maryland Amateur Radio Club  
Chaverim of the Greater Washington Area  
Columbia Amateur Radio Association  
Culpeper Amateur Radio Association  
D-MARC - Digital Mid-Atlantic Radio Council  
Department of State Amateur Radio Club  
Fauquier Amateur Radio Association  
Frederick Amateur Radio Club  
Frederick Amateur Repeater Group  
Goddard Amateur Radio Club  
Green Mountain Repeater Association  
Herndon Repeater Group  
Historical Electronics Museum Amateur Radio Club  
IBM Amateur Radio Club  
Johns Hopkins University APL ARC  
Kent Island Amateur Radio Club  
Laurel Amateur Radio Club  
Leisure World Amateur Radio Club  
Loudoun Amateur Radio Group  
MD/DC MARS (Navy Marine) Association  
MADRAS  
Maryland Emergency Phone Net  
Maryland FM Association  
Maryland Mobileers Amateur Radio Club  
Mercury Amateur Radio Assn., NE Area  
Metropolitan Communications Network  
Metrovision Amateur TV Club

Mid-Atlantic DX & Repeater Assn.  
Montgomery Amateur Radio Club  
Montgomery Auxiliary Communications Service  
Moose Amateur Radio Club  
Mount Vernon Amateur Radio Club  
National Capitol DX Association  
Naval Research Laboratory Radio Club  
NOAA Amateur Radio Club  
North Point FM Association  
Northern Virginia FM Association  
Northern Virginia Radio Club  
Ole Virginia Hams Amateur Radio Club  
Opequon Radio Society  
Pentagon Amateur Radio Club  
Potomac Area VHF Society  
Potomac Valley Radio Club  
Prince George's Wireless Association, Inc.  
Prince George's County ARES/RACES  
Quarter Century Wireless Association, Inc.  
    Baltimore Chapter #20  
    Del-Mar-VA Chapter #150  
    Shenandoah Valley Chapter #137  
    Vic Clark Chapter #91  
    Washington Chapter #23  
Rock Creek Amateur Radio Association  
St. Mary's County Amateur Radio Association  
Shenandoah Valley Amateur Radio Club  
Southern Maryland Amateur Radio Club  
Southern Patuxent Amateur Radio Club  
Stafford Amateur Radio Assn.  
Sterling Park Amateur Radio Club  
Summit Amateur Radio Association  
Tri-County Amateur Radio Club  
T-MARC, Middle Atlantic Repeater Council  
Vienna Wireless Society  
Voice of America Amateur Radio Club  
Waldorf Repeater Support Group  
Washington Adventist Amateur Radio Assn.  
Washington Area Young Ladies ARC  
Woodbridge Wireless, Inc.

## NEXT FOUNDATION MEETING

The Foundation for Amateur Radio, Inc. meets at 8: p.m. on the second Wednesday of each month. Visitors are always welcome! The next meeting will be held on April 10th in Takoma Park, Maryland at Columbia Union College, HMS Richards Bldg., Flower Avenue (Take beltway exit 30, South on Colesville Road to Franklin Avenue, left on Franklin to Flower, right on Flower to Carroll Ave., left on Carroll to Greenwood Ave., left on Greenwood to 2nd building.

Talk-in on  
146.55





# FCC Highlights

By Jack Kelleher.  
W4ZC

## SPECTRUM HEARING DATE SET

The FCC has set March 5th as the new date of its hearing on spectrum policy and management. The original hearing date was January 31st. It had to be rescheduled because of the Federal furloughs triggered by the congressional budget deadlock, and heavy snow which extended the shutdown.

At the hearing, the FCC will hear oral presentations and will allow a direct exchange of viewpoints between individuals and representatives of affected industries. The commission will select panelists from among those who have submitted letters of interest. They will address future spectrum demand and user needs, trends in technology, and approaches to spectrum allocation and assignment, including licensing and uses. (Tnx Amateur Radio Newsline #966).

## ARRL FILES REQUEST TO EXPAND PRB-1

PRB-1 could be expanded to further protect the rights of radio amateurs to erect towers and install antennas. This, if the American Radio Relay League gets its way.

The League wants the commission to take additional steps to compel state and local governments to make reasonable accommodation for Amateur Radio under PRB-1 and apply the least restrictive means to regulate amateur antennas and activity.

In a petition for rulemaking filed February 7, the League calls on the FCC to amend Section

97.15(E) to say that any state or local ordinances restricting ham radio antennas to heights below 70 feet would be presumed unreasonable, unless the state or local authority could show that its restrictions support a clearly defined health, safety or aesthetic objective.

State and local governments also could not impose substantial application costs on amateur service licensees.

The league also wants the FCC to acknowledge that it has an interest in the effective performance of amateur radio stations in areas regulated by deed restrictions or restrictive covenants rather than by local zoning ordinances.

The league says clarifying the preemption policy of PRB-1 will help guide municipalities to enact provisions that make fair accommodation for amateurs and avoid highly divisive litigation between hams and localities. Under the suggested changes, state and local governments could apply to the commission for a full or partial waiver of the amended rules in unusual circumstances.

The FCC has not assigned a rulemaking number to the League petition. (From Amateur Radio Newsline #966).

## VANITY CALL SIGN PROGRAM STALLED

FCC says that it will probably not start up the vanity callsign program in the foreseeable future. Newsline has learned that the FCC will delay until at least mid-1996 announcing the date when it plans to open the first gate or gates of the program.

A Commission spokesman says the FCC must first deal with remaining Petitions for Reconsideration asking for numerous changes in the way vanity calls will be issued.

The FCC had been expected to announce opening dates early this year. Now it could take up to a year or more before the current crop of

*Continued next page*



petitions for reconsideration are addressed. Ironically vanity call sign application 610-V is now available, but the FCC says that it will not accept completed forms until it opens the appropriate filing gates. That could be many months, or possibly years away. (From Amateur Radio Newsline #966).

## **FCC SAYS YES TO HAMS ON 219-220 MHz**

The FCC has affirmed the secondary allocation of 219-220 MHz to Amateur Radio. The action, for the most part, denies a Petition for Reconsideration filed by Orion Telecom, an Automated Maritime Telecommunications System (AMTS) licensee.

Orion had argued to rescind the decision to allocate 219-220 MHz to ham radio. It says the 50-mile exclusion distance between AMTS and amateur operations was insufficient to protect primary AMTS operations from harmful interference.

Orion asserted that a 575 mile exclusion distance was necessary. This would have precluded Amateur Radio operation in many areas.

The FCC did agree with Orion's concern that the amateur rules do not adequately specify the frequency range of AMTS operations. The FCC amended its rules to specifically call attention to the fact that one must look at 217-218 MHz assignments to know what AMTS coast stations are operating in a given area.

ARRL Executive Vice President David B. Sumner, K1ZZ, said the League is pleased that the FCC reaffirms its commitment to provide some relief to the amateur service at 219-220 MHz to offset the loss of access to 220-222 MHz.

Sumner says the ARRL has a procedure in place to ensure that amateurs planning to use 219-220 MHz are aware of their obligations to avoid harmful interference to other services. (From ARRL Bulletin 8, 013196).

## **ARRL vs. AUTO LOCATION**

In comments on an FCC Notice of Proposed Rule Making to temporarily remove hams from the band, the League asked the FCC to maintain existing ham allocations from 75.5 to 81 GHz to spur development of short-range high-speed data links.

Automobile manufacturers differ on the issue of continued Amateur Radio use of the 76-77 GHz band. Ford Motor Company opposes continued use of the band by hams. General Motors says that vehicle radar systems would not be adversely affected by continued amateur use of the band.

Japanese auto makers don't want to use these frequencies at all. They say they prefer 60-61 GHz for these systems.

## **AMATEUR RADIO RESTRUCTURING**

This item is not an FCC highlight; but it does have a bearing on the ARRL's future position on licensing, on international licenses, and other quasi-regulatory issues. Therefore, it is being included here rather than in the ARRL News.

At the Annual meeting of the ARRL Board of Directors on January 19 and 20, the following Resolution was adopted.

WHEREAS, various concepts for simplification of the Amateur Radio Service licensing structure are being discussed in the amateur community; and

WHEREAS, the League is committed to the principle that no structural changes should reduce the privileges of existing classes; and

WHEREAS, maintaining integrity of the amateur examination and licensing process is essential to the future health and growth of Amateur Radio; and

*Continued on page 14*





# American Radio Relay League Report

By John Swafford,  
W4HU

*The ARRL Report provides a brief summary of information published in the ARRL LETTER and other reports. The LETTER provides timely news of interest to active Radio Amateurs. Any League member may subscribe to the ARRL LETTER.*

## Solar Cycle Near Bottom

Despite earlier reports that the current sunspot cycle had bottomed out, it could be another year before things start looking up, depending on which data you use. Solar prognosticator Tad Cook, KT7H, reports that solar activity is still very low, and "we are very close to the solar minimum." The latest projections show 10.7-cm solar flux—actually a radio measurement of the amount of energy at that wavelength—reaching minimum around a year from now, during January and February 1997. Solar flux seems to correlate with density of ionization in the ionosphere and consequent HF propagation.

But other projections based on direct telescopic observations of sunspots, show the sunspot number reaching minimum during April through June of this year, and a big increase starting late in 1997. The sunspot number is derived by counting visible dark spots on the sun and factoring in their area. Last summer, astronomers observed what they believe to be the first spots of the new cycle on the sun's polar regions. Spots shift in magnetic polarity from one cycle to another, Cook says, making it possible to differentiate the "new" spots from the current ones. In any case, just when Cycle 23

begins often is not "officially" determined until well after the event transpires. "There's some overlap" between cycles, he explains.

From Cook's point of view, the solar flux is a more reliable indicator of how solar activity will affect HF propagation on Earth. As most hams know already, solar disturbances, primarily solar flares, can disrupt radio (and other) communication. "These throw out huge amounts of protons," Cook explains about the flares. "If they're aimed right at the earth, they can be very disruptive." Among the most disturbed days in recent weeks was January 29, when the A index reached 18, and the K index was as high as five. Otherwise geomagnetic conditions were quiet over this period, Cook says. Solar flux should head down toward 70 by February 12 and then back above the mid-70s late in the month. Sunspot numbers in late January had a mean of 13.7.

## ABS Radio

Hams helped a Bosnia-bound US Army mobile AM radio station at Fort Meade, Maryland, test its broadcasting capabilities in early February. The station, assisted by a group of Amateur Radio AM enthusiasts in the Washington, DC, area, sought reception reports. Fred Crescoe, KC4MOP; Steve Ickes, WB3HUZ; Ken Moffat, N3EAR; and Paul Courson, WA3VJB, staffed the new Army Broadcast Service station on 1670 kHz, which at first used the call letters KTRK (already assigned to a Texas TV station), but later identified itself simply as "ABS Radio." The frequency is in the newly expanded Standard Broadcast Band. Courson, a broadcaster with Dow Jones Broadcasting, says the station began broadcasting around the clock February 5 and received reports from as far away as California (from an FCC monitoring station). He said he and the other hams were brought in to help "specifically because of our AM activity on the amateur bands." The 5000-W transmitter was working into a 150-foot vertical antenna the hams helped set up and tuned. Courson

*Continued next page*



said the portable station broadcast "an eclectic mix of music" from Fort Meade until February 8, when it was scheduled to be packed up for transport to Bosnia. Once there, it will be set up to entertain and inform US troops stationed there.

### **Miami Tropical Hamboree: Something for Everyone**

The weather might have been the biggest hit of the 1996 Miami Tropical Hamboree February 3-4. Several HQ staffers quit the frozen North and braved opening-day temperatures in the 80s to join volunteers in representing the League at the event.

The Hamboree drew some 12,000 visitors from the US, Canada and elsewhere (perhaps especially the upper Midwest, where the mercury had slumped well below zero for several days).

Hamboree general chairman Evelyn Gauzens, W4WYR (who's also ARRL Southeastern Division Vice Director), says the hourly tours of the nearby National Hurricane Center, a few blocks away from the convention site, turned out to be the highlight of the Hamboree for many who showed up.

Turbulent weather in Northern Florida, where severe thunderstorms erupted, helped lend an air of reality to National Hurricane Center visits.

By the Hamboree's final day, much cooler air moved into Southern Florida, pushing temperatures sharply downward and helping to compensate for the earlier sultry weather and a lack of air conditioning in the exhibit areas. Evelyn says she hopes that problem will be resolved by next year's hamfest.

Rick Palm, K1CE, reports that a meeting of primary hurricane disaster relief net representatives and other interested amateurs—cosponsored by the Hurricane Watch Net and ARRL Field Services Department—was a big success.

Dean Straw, N6BV, had a good turnout for his technical workshop. "Computer-Aided Antenna/System Design of HF/VHF Stations," held February 2. The workshop focused on a "system approach" to antenna design and reviewed the basics of computer modeling of HF and VHF Yagis and other gain antennas.

Bill Kennamer, K5FUV, filled an auditorium for his colorful slide presentation and discussion of the recent XZ1A DXpedition to Myanmar (formerly Burma), on which he was one of the operators.

The new CD-ROM version of QST was the hit of the ARRL booth. QST Editor Mark Wilson, AA2Z, ran the demonstration disk through its paces for dozens of visitors, a number of whom placed orders. The soon-to-be-available CD-ROM features an entire year's worth of QST, plus QEX and NCJ (1995 for the initial offering), including full text, all photographs, schematics and other graphics, and advertisements.

The International Amateur Radio Union's booth, next to the ARRL's along the main drag of the hamfest, also got a lot of attention, especially from foreign hams.

Other activities included an FCC forum, Sky Warn and AMSAT sessions, a presentation on searching for life among the stars (by Paul Schuch, N6TX, of the SETI League) and an instructor-to-instructor forum with Rosalie White, WA1STO.

Well over 100 equipment dealers and other exhibitors—plus a huge array of individual flea marketers—also turned out for the 36th annual Hamboree, billed as the "ARRL Hamfest of the Americas."

### **Races Helps out in New York State Flooding**

The Ulster County (New York) RACES was activated January 24 to assist the National Guard

*Continued next page*



in the Delaware County, New York, flood disaster area to provide equipment and personnel necessary to establish communication between the flood area and the National Guard headquarters in Kingston, New York.

RACES was able to set up a complete communication system and make contact within 15 minutes following activation at the Kingston Armory, reports Don Koeppen, N2WCY, of Woodstock, New York.

### **QRP Amateur Radio Club International Symposium Set**

QRP Amateur Radio Club, International (QRP-ARCI) will hold its first QRP Symposium Thursday, May 16, just as the 1996 Dayton Hamvention gets under way. QRP-ARCI has dubbed it "Four Days in May—the QRP Event of 1996," and hopes to make it an annual event.

Conference presentations, meetings and workshops on "everything you wanted to know about Amateur Radio QRP" will be part of the full-day event, to held at the Days Inn Dayton South. The event culminates with the Friday night banquet May 17.

Advance registration ends May 1, and the fee is \$30 (US check or money order), payable to FDIQ QRP Symposium. Send registrations to Paulette Quick, N9OUH, FDIQ registration, PO Box 145, Madison, WI 53701.

### **New Prefixes for New UK Hams**

Don't think it's the latest DXpedition when the new M-prefix call signs start showing up on the bands this spring. The United Kingdom is running out of the familiar G-series call signs the government there has issued since the 1920s for most UK stations.

The Radiocommunications Agency will begin issuing the M-series calls starting April 1 to all

new full licenses (both Class A and B). The first call sign, M0AAA, has already been awarded to the Reading and District Amateur Radio Club.

### **In Brief**

*\*This Week in Amateur Radio*—an audio news magazine—returned to the satellite airwaves as planned on January 27. But executive producer Stephan Anderman, WA3RKB, reports one glitch. Due to a winter storm, the uplink station in Knoxville, Tennessee, was knocked out when the uplink dish iced up. "Everything is now back in order, and we expect a long smooth ride on Anik E2!"

*\*The AMSAT-DOVE team is still trying to get things right on the crippled DOVE-OSCAR 17 research and educational satellite, which crashed first in early December, then again during software reloading efforts in late December. The satellite is in MBL (Microsat Boot Loader) mode while controllers sort out what's wrong and attempt another reloading.*

*\*Frank R. Casey, WB2HKU, has been named the 1995 International Telecommunicator of the Year by the Association of Public-safety Communications Officials. Frank, who's blind, is senior telecommunications supervisor at the Albany County (New York) Sheriff's Department, where he's worked for 27 years. He's also active in RACES and ARES. Frank received the award at APCO's 61st International Conference and Exposition in Detroit last fall. Congratulations!—APCO Bulletin*

*\*The Byte Mark Corporation seeks 250 beta testers for its new CoreCalc for Windows program, which helps users select and use Amidon toroid cores. The program looks up the A value of the powdered-iron toroid, calculates the number of turns needed for the desired inductance, suggests wire size and even calculates prices associated with Amidon parts orders. Test subscriptions are \$29.95. For details, contact ByteMark Corporation, 7714 Trent St, Orlando, FL 32807; tel, 407-679-3184; fax, 407-673-2083.*





## Elmer's Corner

By Paul E. Wilkins,  
AB4CY

### From Phone Jacks to Keypad

A hundred years ago the early telephone subscriber's line terminated in the "central office" at a phone jack. We still have those in almost every piece of communication gear. The operator at central used a phone plug (we still use those too) to connect to the incoming call to determine the party desired and would then jumper connect between the two subscriber phone jacks to complete the call. When the call was complete the jumper had to be removed. It was a completely manual system and it didn't take too many subscribers to require huge banks of phone jacks and plugs as well as a lot of operators,

The first main improvement in telephone circuit switching was the adoption of the rotary dial switch. This ingenious electro-mechanical device generated a regularly spaced set of DC current pulses for each of the digits one through zero(10). These were decoded by an equally ingenious device, the "stepping switch", which advanced to the next position upon receiving a DC pulse, and then changed to a second switch bank to "set" the next number. The AUTOCALL system (for which this publication is named) used stepping switches to decode pulse trains sent via radio. This mechanical system was relatively slow by today's standards. It took the better part of a second to set a zero (ten pulses).

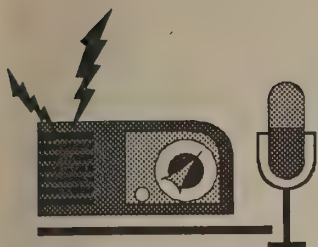
The dial tone was introduced to replace the operator's "number please". Three alphabet letters were added to each digit position to take care of new numbers when the system ran out of it's number inventory. For instance, using a maximum of four digits, there are less than ten thousand distinct numbers between 0000 and 9999. By adding a fifth digit, nearly one hundred thousand

are available and with a sixth digit the available number grows to about a million. Instead of adding digits, named "exchanges" were invented so phone numbers for several decades were two letters plus four numbers, like JE-2779. The JE stood for Jefferson and was my phone number for a number of years. In the intervening years they had to add area codes and three letter prefixes to the original four digit number to accommodate system growth. Go International, and it adds another three digit "country code". There are no alphabet letters over the digit one and the alphabet letters Q and Z are not used.

By the late 1940's, the dialing speed was uselessly occupying a lot of available network time. A tone system was adopted to speed dialing time. Since a single tone might be corrupted, a dual-tone multi frequency(DTMF) design was developed. The story of how the tone frequencies were selected is fascinating. It has to do with finding frequency pairs adequately separated with no overtone overlap up to the 11th harmonic. Today there are 16 tone pairs, one in a low frequency group and one in a high frequency group. The DTMF we are used to uses only 12 ( 10 digits and the \* and the # sign). The remaining pairs are sometimes used as control signals but they are there for eventual system expansion to 16 symbols. The low group contains tones at 697, 770, 852, and 941 HZ. The high group contains 1209, 1336, 1477, and 1623 Hz. So, for instance, when you press the "3" key you generate the 697,1477 Hz. pair. Using the DTMF results in a switching time of about 30 milliseconds because it takes that long to determine the audio frequency of the tone. Auto-dialing has to be slow enough to do the audio frequency detect so computer speeds don't work.

I suspect it won't be too long before a computerized switching system will be adopted to drop the dialing time from your home phone another order of magnitude. That will place a micro in your telephone and probably a memory of a hundred numbers commonly called so the machine doesn't have to wait for our clumsy finger to find the keys on the pad.





## **DX DX DX**

By John Kanode,  
N4MM

### **NORTH KOREA (P5) OPERATION TO TAKE PLACE IN APRIL**

The recent North Korea operation has been rescheduled for the second half of April. The DPRK project group, which is headed by Mr. Chen Ping, BAIHAM, Deputy Secretary General of the CSRA, has been busy maintaining multiple contacts and discussing additional steps required to establish Amateur Radio in the DPRK and make P51DX QSO's available.

The reason the trip has been rescheduled is due to sporadic flight connections from Beijing and the exceptionally severe winter which has effected normal life in the DPRK.

The underlying aim of the DPRK project is to establish permanent activity with the large base of radio communications enthusiasts that are currently involved in ARDF (Amateur Radio Direction Finding) as well as in classroom morse competitions. More info as it becomes available will be posted on the Internet and sent to DX Newsletters.

The demand for this recent addition to the ARRL DXCC List is great. Only one brief demo of Amateur Radio has taken place from this country and resulted in about 16 QSO's, mostly with stations in Japan. With the solar cycle at or near bottom, working this one from the east coast is going to be very difficult, even for stations with big antennas. The window of propagation will be very brief, if at all.

In an ARRL DXCC NEWS RELEASE dated

February 21, 1996, it was announced that the ARRL Awards Committee voted to disqualify Romeo Stepanenko from DXCC.

The ARRL Awards Committee met recently to review submitted documentation for the 1992-1993 P5R57 operation submitted by Romeo Stepanenko. After a review of all material available, the Awards Committee voted unanimously to disqualify Romeo Stepanenko from participation in the DXCC program. This disqualification is based on Rule 12, Operations Ethics and Rule 13.

The disqualification means that Stepanenko is NOT eligible to participate in the DXCC program in any manner. This includes, as provided for under Rule 12, paragraph (b) disallowance of contacts made with any station or Dxpedition operated by him from the time of this action.

### **ARRL PRESIDENT APPOINTS DXCC 2000 COMMITTEE**

On February 26, 1996, ARRL President Rod Stafford appointed the DXCC 2000 Committee. This committee was created by ARRL Board action at it's January 1996 Annual Meeting.

The committee which is made up of prominent DXers will have the task to review all aspects of the ARRL DXCC program. One of the goals is to increase interest and participation in the program by new amateurs.

#### **THE COMMITTEE:**

John C. Kanode, N4MM, Chairman  
Larry E. Price, W4RA  
Rick Roderick, K5UR  
Walt Stinson, WØCP  
Jim Maxwell, W6CF  
Garth Hamilton, VE3HO  
Chuck Hutchinson, K8CH  
Bob Kennamer, K5FUV  
Wayne Mills, N7NG  
Bob Winn, W5KNE

*Continued on page 16*



WHEREAS, the League is cognizant of efforts to harmonize the standards for amateur licensing in different countries, which supports the objective of reducing the barriers to the movement of radio amateurs across international borders; and

WHEREAS, these issues are related to the provisional WRC-99 agenda item to consider Article S 25 of the international Radio Regulations, the technical and operational rules governing the Amateur and Amateur Satellite Services, including but not limited to the requirement to demonstrate Morse code ability in order to operate below 30 MHz; and

WHEREAS, the ARRL Board of Directors recognizes that it is essential for the League to solicit input on these issues from the broad range of its membership and to develop policies that will insure the future health and growth of Amateur Radio;

NOW THEREFORE, BE IT RESOLVED, that the President is authorized to appoint a committee made up of Board members and other representatives of the broad range of the membership.

The terms of reference shall be to make recommendations for ARRL policy positions encompassing the issues listed above.

The committee's first tasks shall be to define the process by which membership input should be solicited and the opinions of the membership objectively determined, and to formulate a request for funding for this process and for the remainder of the committee's work.

The target date for completion of these initial tasks shall be 120 days after appointment.

The committee's final report shall be rendered to the Board no later than December 17, 1996.

## HTs AT THE ATLANTA OLYMPICS

This just in via e-mail from Andrew Funk, KB7UV, Assistant News Operations Editor of WAGA-TV and a member of the Atlanta Olympic Broadcast Frequency Coordination Committee.

A word of warning for hams coming to Atlanta for the Olympics: leave your HT at home!

As a member of the Olympic Broadcast Frequency Coordination Committee I am familiar with plans for RF management during the 1996 Centennial Olympic Games in Atlanta. To say things are going to be tightly controlled is an understatement. For example, all broadcast-related RF gear will be required to pass an Olympic certification inspection in addition to that required by the FCC. (And I once found Amateur repeater coordination difficult!)

This will undoubtedly have an impact upon Radio Amateurs attending the games. As our VHF and UHF handheld radios are known to be easily modified for wideband use, security officers will not permit Amateur HTs at Olympic venues.

Some may argue that this policy is unreasonable. It may or may not be, but it will be in effect and enforced. I suggest that hams attending the Olympics avoid the hassle - don't bring your HT to the games.

These last two items are in line with your editor's intent to change the title and the content of this column to "Radio Amateur Regulatory Highlights", and to include not only FCC highlights, but also relevant highlights emanating from the National Telecommunications and Information Administration (NTIA), the Department of State, and the International Telecommunication Union (ITU). The timely information which is becoming available in ever-increasing volume via the Internet and the World Wide Web should make our collection and editing task easier (but not easy).





## Traffic Fun

By Geri Sweeny,  
N4GHI

**HOLIDAYS:** Month's with holidays bring much pleasure to traffic handlers. They can depend on lots of traffic to keep them busy. April has Easter and May - Mother's Day. While many messages are conventional (using ARL sixty\_\_\_\_); some are wonderfully creative. You can say a lot in 25 words. It's fun reading these as they are relayed.

**STERLING PARK ARC:** A quality group of amateurs. They are not only involved in normal club activities (such as radio training classes, meetings, etc) but also sponsor the Virginia QSO Party (in March), and sort bundles of QSL cards. And, they have at least one traffic handler - KR4TF, Mike. A well rounded club.

**WIPEX,** in Nashua, NH, sends everyone on his QCWA roster a message. I wonder how many of you, who belong to QCWA, have received one? His message says something like, "Life is great here in NH. Hope the same with you. What are you up to query. Hope you are well and still enjoying amateur radio." I recently relayed a reply from a fellow in North Carolina to Dan, W1PEX.

It said, "Doing fine for eighty eight and still hamming a little x Your message appreciated"

May we all still enjoy our hobby when we are in our eighties. But, why wait? Send a message now. Listen in to your local 2-meter traffic Net. Then, try checking in. But, you don't have to know how to format a message. Just call a traffic handler and ask them to do it for you.

BTN (Baltimore area) 6:30 pm 146.67

NVTN (No VA, DC, So MD) 7:30 pm 147.30

### VIRGINIA (\*new area code 540)

N4ABM Ole	Reston	860-0512
N6ANQ John	Mt Vernon	360-3773
N4DCC Bill	Falls Church	534-1972
W4HU John	Arlington	536-9537
WB4KSG Lon	Stephenson	662-4242*
WD4MIS John	Arlington	534-1428
KR4MU George	Arlington	538-4959
N60D Bob	Woodbridge	590-5678
N3PDK Mike	Alexandria	671-2627
KR4TF Mike	Sterling Pk	450-6921
KD4TWR Dave	Leesburg	777-5070*
N4YE Buddy	Centreville	830-3195
W4YE Chris	Annandale	256-8087
KC4YGB Roy	The Plains	253-5463*

### MARYLAND

K3CY Buck	Rivera Bch	255-0896
N3IVO Rosie	Baltimore	744-4362
K30RW Jim	Taneytown	751-1676
WJ3R Gordon	Severna Pk	647-2956
N3VEJ Doug	Parkville	256-0257
N3VBJ Jerry	Dundalk	284-6117

## ELMER

By Rich Regent, K9GDF





If anyone wishes to submit any ideas or suggestions to the committee, please send them to DXCC 2000 Committee, c/o ARRL, Attn: Chuck Hutchinson, 225 Main Street, Newington, CT 06111.

### UPCOMING DX CONTESTS

EA RTTY Contest	April 6-7, 1996
Holyland DX Contest	April 6-7, 1996
SP DX Contest	April 6-7, 1996
Japan Int'l DX Contest	April 12-14, 1996
Helvetia Contest	April 27-28, 1996
YU DX Contest	April 27-28, 1996

### TIDBITS

Update on the Kermadec DXpedition. The DXpedition team of Ken, ZL2HU; Chris, ZL2DX; Ron, ZL2TT; Lee, ZL2AL; Al, WA3VFN and one to be named Japanese operator will be active for 11 days from Kermadec from May 4 to May 14, 1996.

The team will depart New Zealand on April 30 aboard the research vessel "EVOHE". This modern ship has been inspected by the team in New Zealand and meets the highest specifications of reliability and safety. The ship has two Zodiacs and two additional safe landing crafts.

Kermadec Island has moved up the Most Wanted List over the years and is needed by many DXers.

DXCC country to be sold. An article in the Monday, February 12th edition of the "Pacific Daily News" newspaper in Guam, titled "family selling Palmyra Atoll to New York firm".

The article states that the Fullard-Leo family of Honolulu is selling Palmyra Atoll investment firm of KVR, Inc. The new owner is thinking about using Palmyra for scientific research and hotel

development.

The atoll covers about 6000 acres of lagoons and land, with about 600 acres of dry land which has never been developed. If this takes place, it would make Palmyra an easy place to conduct a DXpedition.

The 5A1A operation has become somewhat of a stalemate. It has not become an accredited operation for DXCC credit due to the fact that proper documentation for this operation has NOT been received at the DXCC desk.

It is reported that something from any Ministry Department in Libya, approving the operation of the ASSAKR Radio Club would be enough to get the operation approved. Getting approval for past Libyan operations has been very difficult and is a long process. There is still hope that this operation will be approved in the future.

GAZA and JERICHO: It has been reported that Gaza and Jericho will NOT get an ITU prefix before 1997. Once this important step is done, it would make it easier to consider these two entities for future DXCC status.

The Southwest Ohio DX Association will hold its Annual DX Dinner on Friday, May 17, 1996 at the Stouffer Renaissance Hotel in Dayton, Ohio.

There will be a cash bar at 6:30 and dinner at 7:15. Tickets must be purchased in advance and are available from:

Tom Inglin, NR8Z  
4061 Eaton Road, Hamilton, Ohio 45013.

The tickets are \$29.00 each, and if ordering tickets, please make check out to SWODXA and send a SASE for ticket return.

For more info on the dinner, contact Steve Bolia, N8BJQ at S13-429-9954 or via Internet at N8BJQ@ERINET.COM.





# Winning QSO Parties

By Page Pyne  
WA3EOP

Contesting is like entering another world for many hams. Entering a big contest is often best for those with high power or large antennas and with computer assisted logging.

If you don't like the high pressure operating of these events, a state QSO Party may fulfill your contest hopes and you don't need a big rig to be competitive. QSO Parties like the "Maryland-DC QSO Party" held in August each year will offer certificates to participants who achieve a designated level of achievement. (50 QSO Points for the Maryland Test.)

I have won Maryland titles in several QSO Parties. Some of these titles have been secured with but 4 or 5 hours of operating time.

Here are a few tips you might try when entering a QSO Party:

1. Know the rules. The rules themselves often give clues to obtaining higher scores. Don't take suggested frequencies as gospel. Stations often operate up or down from suggested frequencies. A frequency that sounds clear on your end may have significant QRM to other stations in the QSO Party area.

2. Judge the skip zone. It only takes a few minutes to scan all the bands to learn which bands favor the state you wish to work.

3. If your state is hosting the party, check to see how the multipliers are accumulated. In-State County Multipliers are usually best obtained on 160, 75-80, or 40 meters. Out-of-State multipliers

are best accumulated on the higher frequencies during the day and on lower frequencies at night. Multipliers usually build final score at a higher rate than simple QSOs !

4. Unless you are a CW addict, you will probably work more stations using voice modes. If CW contacts are higher point value QSO's, during slack voice times, consider looking for CW QSO's. A few parties like the ILLINOIS QSO PARTY actually have more stations on CW than on phone.

5. If there are suggested hours for CW - always check the bands for CW activity at those hours. Remember, its OK to call CQ at YOUR comfortable operating speed and see what happens. There could be someone else checking an otherwise quiet band for possible contest QSO's.

6. Don't forget the VHF simplex frequencies. hey are good for working the close in multipliers. Some contests offer extra points for contacts with mobiles and where better to find mobiles than on VHF? Some operators have been known to go on local repeaters and announce that they will monitor a certain simplex frequency for local contest calls.

7. Be sure to follow the rules when computing your score. Send your log with score calculation to the sponsor promptly. Always include a self-addressed stamped envelope along so the sponsor can send you a copy of the results and any award you may have won. Include a declaration that you followed the rules to the best of your belief and sign your entry!

QSO Parties can be a lot of fun. As mentioned at the beginning of this article, most state QSO Parties are not high pressure contests. You can take the time for a few longer QSO's along the way. In the wonderful Maryland-DC QSO Party, often two or three friends will share frequencies for awhile, alternating CQs and talking to each other between QSO's. What a great way to spend a day! The state QSO Parties are what you make of them - give them a try!



## 1996 YOUNG HAM OF THE YEAR AWARD NOMINATING PERIOD NOW OPEN

The nominating period for 1996 "Young Ham of the Year Award" is now open. Originally known as the "Westlink Report Young Ham of the Year," this award program, now entering its second decade, is presented annually to a United States licensed Radio Amateur (Ham) who is 18 years of age or younger and who has provided outstanding service to the nation, his/her community or the betterment of the state of the art in communications through the Amateur Radio hobby/service.

Any continental United States (FCC licensed) ham radio operator aged 18 and younger who has used Amateur Radio to significantly contribute to the benefit of the service, to the state of the communications art, to their community or the nation is eligible to be nominated.

All nominations must be submitted before June 30, 1996 on an official application. Application forms are available for a self addressed stamped envelope mailed to the 1995 Young Ham of the Year Award % Newslite, 28197 Robin Avenue Saugus California 91350. These nominating applications are also for electronic download from several sites that provide Newslite materials over the World Wide Web and from the general interest ham radio files area on GENie and America Online (AoL Ham Radio Club BBS - General Interest Files).

With continued corporate sponsorship, the award presentation is scheduled take place at the 1996 Huntsville Hamfest. The Huntsville Hamfest is one of the nations largest and most popular Amateur Radio conventions. It is held annually the third weekend in August at the Von Braun Civic Center in downtown Huntsville and usually attracting some 7000 attendees.

Corporate underwriting for the "Young Ham of the Year Award" program is supplied by Yaesu U.S.A. Corporation and CQ Magazine. Yaesu is a world leader in the design, manufacture and distribution of high quality Amateur Radio and commercial two-way radio equipment. CQ Magazine and its sister publications CQ-VHF and CQ-Contest are owned by CQ Communications and are considered the trend-setting publications serving todays modern radio amateur. The continued support of this award by Yaesu and CQ has been well- received within the U.S. Amateur Radio Service.

Past recipients of the Young Ham award, all of whom epitomize the heart of dedication to their nation include Shawn Alan Wakefield, WK5P, of Bartlesville, Oklahoma (1986); David Rosenman, KA9PMK, of Muncie, Indiana (1987); Jonathan Binstock, NK3D, of Potomac, Maryland (1988); Erin McGinnis, KAOWTE, of Topeka, Kansas (1989); Mary Alestra, KB2IGG, of Staten Island, New York (1990); Richard S. "Sammy" Garrett, AAOCR, of St. Louis, Missouri (1991), Angela (Angie) Fischer, KBOHXY, also of St. Louis (1992); Kevin Boudreaux N5XMH of New Orleans Louisiana (1993), Allison Zettwoch KD4CKP of Louisville Ky. (1994) and Adam Weyhaupt N9MEZ (1995).



## FAR Scholarships

THE FOUNDATION FOR AMATEUR RADIO, INC., plans to administer fifty-seven (57) scholarships for the academic year 1996-1997 to assist licensed Radio Amateurs. The Foundation, composed of over seventy-five local area Amateur Radio Clubs, fully funds eight of these scholarships with the income from grants and its annual Hamfest. The remaining forty-nine (49) are administered by the Foundation without cost to the various donors.

Licensed Radio Amateurs may compete for these awards if they plan to pursue a full-time course of studies beyond high school and are enrolled in or have been accepted for enrollment at an accredited university, college or technical school. The awards range from \$500 to \$2000 with preference given in some cases to the pursuit of certain study programs or to residents of specified geographical areas (Delaware, Florida, Maine, Maryland, New Jersey, Ohio, Pennsylvania, Virginia and Wisconsin). Amateur Radio clubs are encouraged to announce these opportunities at their meetings, on their nets, during training classes, and in their club newsletters.

Additional information and an application form may be requested by letter or QSL card, postmarked prior to April 30, 1996 from:

**FAR Scholarships  
6903 Rhode Island Avenue  
College Park, MD 20740**

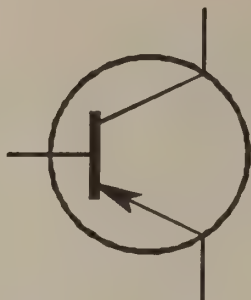
## 1996 YOUNG HAM WINNER HEADED TO SPACECAMP

The youngster chosen as 1996 Young Ham of the Year will get a chance to know what it's like to train to become an astronaut. "CQ" Magazine will treat the 1996 YHOTY winner to a week at "Spacecamp-Huntsville" (Alabama), in addition to other prizes supplied by Yaesu U.S.A. Corporation and Newsline. "As we enter our second year as a co-sponsor of the Young Ham of the Year award program, we are expanding our participation to include a week as Spacecamp," said CQ Publisher Richard Ross, K2MGA. Ross notes that: "Our nation has a growing need for well-trained scientists and engineers, and even if they don't become astronauts, the Spacecamp experience can help young people get started toward technical careers."

Newsline producer and Award Administrator Bill Pasternak, WA6ITF, who has visited the Huntsville Spacecamp facility, added: "Since childhood, I have loved technology and have been intrigued by space exploration since I read my first Buck Rogers comic book. Now, even at age 54, I would love to spend a week going through the program at Spacecamp to find out what it's like. If it means that much to a big kid like me, imagine what it can mean for the future of a youngster who may be the one to lead us to the stars. My thanks to Dick Ross and CQ for making this all possible."

The week at Spacecamp is in addition to other prizes and commendations to be presented to the youngster selected as 1996 Young Ham of the Year. He or she will also receive an expense paid trip to the Huntsville Hamfest. The actual Young Ham of the Year Award plaque will be presented at the Huntsville Hamfest Grand Banquet along with a special prize in the form of ham radio equipment. The trip to the Huntsville Hamfest and radio equipment are courtesy of corporate underwriting sponsor Yaesu U.S.A.





# Amateur Radio Training

John Forrest WZ4A  
6111 Burnett St., Alexandria, VA 22310  
(703)971-3905

Please send announcements for training classes and club training contacts to WZ4A at the above address. Deadline is the 25th of the 2nd month prior to the *Auto Call* publication date (e.g., 25 December for the February issue).

## Club Training Contacts

Alexandria RC	Rich Adamy KA4GFY	(703)644-3920
Anne Arundel RC	Tony Young WA3YLO	(301)262-1917
Arlington ARC	Fred Bardsley WD4DHW	(703)533-0372
Antietam Radio Assn.	Robert Long KD3JK	(301)824-5132
BRATS (Baltimore)	Joe Chidester W3SHZ	(410)602-0353
Baltimore ARC	Essex Community College	(410)780-6854
Fauquier ARC	Neil Spokes AB4YK	(540)364-3861
Frederick ARC	Hal Silverman W3HWC	(301)831-7946
Herndon Rep't Gp	Michael Weber WB8RDN	(703)450-2304
Laurel ARC	Pud Reaver W3DQI	(301)498-6293
Madras	Larry Ziecheck	(301)984-6113
MD Mobileers ARC	Bruce Colburn AA3KR	(410)437-1891
Montgomery ARC	Rocky Jones KC4UXO	(301)216-5210
Mt. Vernon ARC	John Forrest WZ4A	(703)971-3905
NASA/Goddard ARC	Vikki Gigante KA3PVS	(301)249-2609
Ole VA Hams ARC	Charles Dale WA4YGI	(703)361-3091
Pentagon ARC	David Boyd K9MX	(540)659-6241
St. Marys Co. ARC	Peter Butt WA3UMY	(301)862-2214
Shenandoah Val ARC	Guy Black W4PSJ	(540)722-4952
Southern MD ARC	Vic Curtis WA3YUV	(301)888-1388
Southern Pax ARC	Dwayne Kincaid WD8OYG	(410)586-2177
Stafford Adult Ed	Jerry Mullinix AC4HK	(540)659-3905
Sterling Park ARC	Forrest Snyder N4UTY	(703)430-4149
Tri-County ARC	John Creel WB3GXW	(301)572-5124
Vienna Wireless	Paul Wilkins AB4CY	(703)560-2779
Woodbridge Wireless	Jim Duffey WD4AIR	(703)491-3170



## Class Announcements

*[Editor's note: Please send all class announcements to the Training Coordinator, John Forrest WZ4A at 6111 Burnett St., Alexandria, VA 22310, (703)971-3905. Do not send class announcements or testing schedules to the Auto Call editor. Thanks!]*

**NOVICE/TECHNICIAN COURSE:** The Montgomery Amateur Radio Club will conduct a course for the Novice and Technician licenses including Morse code instruction on Tuesday and Thursday evenings from 7 to 9 PM starting April 23. The course will run through May 30. Location is Gaithersburg High School. There is no charge for the course; however students will be expected to provide their own ARRL license manuals. Contact Rocky Jones KC4UXO at (301)216-5210 for details.

**TECHNICIAN NO-CODE CLASS:** The Old Virginia Hams will present a no-code technician class from March 26 through June 4, 1996 in room 3A at Stonewall Jackson High School, Manassas, VA. Classes will be held Tuesday evenings from 7:00 PM to 9:00 PM. Text is ARRL Publication "Now Your Talking" 2nd edition available at local amateur radio stores. Contact Ery/KT4DS at (703) 335-1029.

## SPECIAL EVENTS STATION THE NATIONAL ACADEMY OF SCIENCE

There will be a special events station at the National Academy of Sciences in Washington, DC, the weekend of 13-14 April 1996. The station and an ARRL exhibit about Amateur Radio are being set up at the Academy as part of a joint celebration of the founding of Network Broadcast Radio 75 years ago and of (amateur!) Marconi's first trans-atlantic radio transmissions 100 years ago.

The principal activity at the Academy that weekend is a public concert on Sunday which will include a performance of "Eight Radios", a 1950's composition by American composer John Cage.

Led by NAS staffers Tom Rozzell, WB4ZTT, and Mary Pat Nowack, KE4QWK, with Roger Kaul, K3TM, Bob Teitel, W3IDT, and others, two HF stations and a VHF/UHF packet stations will be on the air from the Great Hall in the main building of the Academy in downtown Washington. Look for the station .047 Mhz up from the edge of the CW and the Advanced and General class SSB bands, especially 80, 40, and 20 meters. As of publication deadline, the call to be used and the QSL procedure are not yet known.





## Volunteer Examiner Cooperative

JOHN FORREST WZ4A  
6111 Burnett St.  
Alexandria, VA, 22310  
(703) 971-3905

\* Effective July 1, 1996, the Extra Class written exam question pool (Element 4B) will change. It is anticipated that the new question pool will be significantly different from the old pool. Be sure to use study materials appropriate for the current question pool.

\* The maximum exam fee has been raised by the FCC to \$6.05.

\* Copies of the complete (as of date) 1996 VEC Exam schedule from the *Auto Call* database are available. To obtain a copy, please send a large, self-addressed envelope with sufficient postage to cover 10 letter-size pages along with \$2.00 to cover copying costs to WZ4A at the above address.

## 1996 Schedule of Examinations

<b>April 7 (Sunday)</b>	<b>Landover, MD - D.C.M. ARC (W5YI VEC) Walk-In</b> Contact: Freddie Battle NG3G (202)546-9348 (Day) (301)773-2898 (Evening)
<b>April 13 (Saturday)</b>	<b>Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In</b> Contact: Frank Mackey N4GUS (703)455-1510 Note: Temporary location change starting in July. Call for directions
	<b>Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC), Walk-In</b> Contact: Bob Israel WC3I (301)262-5083
	<b>Cumberland, MD - Mountain ARC (Mount. ARC VEC) Walk-In</b> Contact: Leo Patterson KQ8E (304)289-3576 Gay Rembold W3DFW (301)724-0674
<b>April 16 (Tuesday)</b>	<b>Towson, MD - Baltimore ARC (ARRL VEC)</b> Pre-Registration/Walk-In Requirements Unknown Contact: HAM-TALK (410)426-8255



<b>April 20 (Saturday)</b>	<b>Smithburg, MD - MADRA (ARRL VEC).</b> Pre-registration desirable. Contact Mike, WB8VBW (301) 416-8447 box 110
	<b>Sterling, VA - Herndon Repeater Group (ARRL VEC) Walk-In</b> Contact: Mike Weber WB8RDN (703)450-2304
	<b>Laurel, MD - Laurel ARC (Laurel VEC)</b> Pre-Registration Desirable, Limited Walk-In Contact: John Creel WB3GXW (301)572-5124 after 6 PM
<b>April 28 (Sunday)</b>	<b>Hagerstown, MD - Antietam Radio Assn. (ARRL VEC)</b> Pre-Registration Requested - Some Walk-Ins Accepted Contact: Al Boyers N3NVT (301)733-6522 Days Bob Long KD3JK (301)824-5132 Evenings Before 9PM
<b>April 30 (Tuesday)</b>	<b>Annapolis, MD - Maryland Mobileers ARC (Laurel VEC)</b> Pre-Registration Requested, Limited Walk-In Contact: Lois Turner KA3VVQ (410)647-4178
<b>May 5 (Sunday)</b>	<b>Landover, MD - D.C.M. ARC (ARRL VEC) Walk-In</b> Contact: Freddie Battle NG3G (202)546-9348 (Day) (301)773-2898 (Evening)
	<b>Elkins, WV (Mountain ARC VEC) Walk-In</b> Contact: Walter Corley KF8SX (304)637-0506
<b>May 11 (Saturday)</b>	<b>Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In</b> Contact: Frank Mackey N4GUS (703)455-1510 Note: Temporary location change starting in July. Call for directions
	<b>Baltimore, MD - Moose ARC (ARRL VEC) Walk-In</b> Contact: (410)889-5214
	<b>Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC), Walk-In</b> Contact: Bob Israel WC3I (301)262-5083
<b>May 18 (Saturday)</b>	<b>Laurel, MD - Laurel ARC (Laurel VEC)</b> Pre-Registration Desirable, Limited Walk-In Contact: John Creel WB3GXW (301)572-5124 after 6 PM
	<b>Smithburg, MD - MADRA (ARRL VEC).</b> Pre-registration desirable. Contact Mike, WB8VBW (301) 416-8447 box 110



<b>May 28 (Tuesday)</b>	<b>Glen Burnie, MD - Maryland Mobileers ARC (Laurel VEC)</b> Pre-Registration Requested, Limited Walk-In Contact: Jerry Gavin NU3D (410)761-1423
<b>May 31 (Friday)</b>	<b>Stafford, VA - Fredericksburg VE Team/Stafford ARA (ARRL VEC)</b> Walk-In. Contact: Carolyn Cavanagh AC4SK (540)373-7076 Jim McCloud N4LZJ (540)786-8012
<b>June 2 (Sunday)</b>	<b>Landover, MD - D.C.M. ARC (W5YI VEC) Walk-In</b> Contact: Freddie Battle NG3G (202)546-9348 (Day) (301)773-2898 (Evening)
<b>June 8 (Saturday)</b>	<b>Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In</b> Contact: Frank Mackey N4GUS (703)455-1510 Note: Temporary location change starting in July. Call for directions.
	<b>Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC), Walk-In</b> Contact: Bob Israel WC3I (301)262-5083
	<b>Cumberland, MD - Mountain ARC (Mount. ARC VEC) Walk-In</b> Contact: Leo Patterson KQ8E (304)289-3576 Gay Rembold W3DFW (301)724-0674
	<b>Manassas, VA - Ole Virginia Hams (ARRL VEC) Walk-In</b> Contact: Harry Vorhauer, W4PVA (703)368-6050
<b>June 11 (Tuesday)</b>	<b>Annapolis, MD - Maryland Mobileers ARC (Laurel VEC)</b> Pre-Registration Requested, Limited Walk-In Contact: Lois Turner KA3VVQ (410)647-4178
<b>June 15 (Saturday)</b>	<b>Laurel, MD - Laurel ARC (Laurel VEC)</b> Pre-Registration Desirable, Limited Walk-In Contact: John Creel WB3GXW (301)572-5124 after 6 PM
	<b>Smithburg, MD - MADRA (ARRL VEC). Pre-registration desirable.</b> Contact Mike, WB8VBW (301) 416-8447 box 110



<b>June 20 (Thursday)</b>	<b>Towson, MD - Baltimore ARC (ARRL VEC)</b> Pre-Registration/Walk-In Requirements Unknown Contact: HAM-TALK (410)426-8255
<b>July 13 (Saturday)</b>	<b>Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In.</b> Contact: Frank Mackey N4GUS (703)455-1510 Note: Temporary location change starting in July. Call for directions.
	<b>Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC)</b> Walk-In. Contact: Bob Israel WC3I (301)262-5083
<b>July 20 (Saturday)</b>	<b>Laurel, MD - Laurel ARC (Laurel VEC)</b> Pre-Registration Desirable, Limited Walk-In Contact: John Creel WB3GXW (301)572-5124 after 6 PM
<b>July 27 (Saturday)</b>	<b>Fredericksburg, VA - Fredericksburg VE Team/Stafford ARA (ARRL VEC) Walk-In.</b> Contact: Carolyn Cavanagh AC4SK (540)373-7076 or Jim McCloud N4LZJ (540)786-8012
<b>July 28 (Sunday)</b>	<b>Hagerstown, MD - Antietam Radio Assn. (ARRL VEC)</b> Pre-Registration Requested - Some Walk-Ins Accepted Contact: Al Boyers N3NVT (301)733-6522 Days Bob Long KD3JK (301)824-5132 Evenings Before 9PM
	<b>Brunswick, MD (SweatFest 96) (ARRL VEC).</b> Pre-registration desirable. Contact (301) 416-8447 box 110.
<b>July 30 (Tuesday)</b>	<b>Glen Burnie, MD - Maryland Mobileers ARC (Laurel VEC)</b> Pre-Registration Requested, Limited Walk-In Contact: Jerry Gavin NU3D (410)761-1423
<b>August 4 (Sunday)</b>	<b>Berryville, VA - Shenandoah Valley ARC (Hamfest) (Mount. ARC VEC)</b> Pre-Registration Desirable Contact: Leo Patterson KQ8E (304)289-3576 Gay Rembold W3DFW (301)724-0674





# Volunteer Examiner Cooperative

## EXAM FEES:

- \* Check for appropriate exam fee. Fees and modes of payment for individual VECs and exam teams may vary.
- \* ARRL VEC exams cost \$6.05
- \* Laurel VEC exams are free
- \* Mountain VEC exams are free
- \* W5YI VEC exams cost \$6.05

## BRING TO EXAM:

- \* Picture identification
- \* Completed FCC form 610 (most VE teams will supply at exam)
- \* Original and a copy of current FCC amateur radio license
- \* Originals and copies of all active certificates of successful completion of prior exams
- \* Exam fee (check or cash depending on VE team)

## "GRANDFATHER" CREDIT FOR ELEMENT 3B (GENERAL WRITTEN):

\* If you presently hold a Technician class license which was first issued prior to March 21, 1987, you may be grandfathered for Element 3B (General class written exam) by presenting the original and a copy of the license dated prior to March 21, 1987 to the VE team! It is your responsibility to prove that you are entitled to grandfathering. Do not lose your original license!

## RULES FOR SUBMISSIONS TO THE FAR VOLUNTEER EXAMINER COOPERATIVE:

1. All submissions must be in writing
2. Date and day of week must be specified for each exam date
3. Point of contact and phone number must be specified
4. Sponsor and location must be specified
5. VEC must be specified
6. Exam dates up to 12 months in advance will be accepted
7. Deadline for submission is 25th of the 2nd month prior to publication date (e.g., January 25 for March issue)



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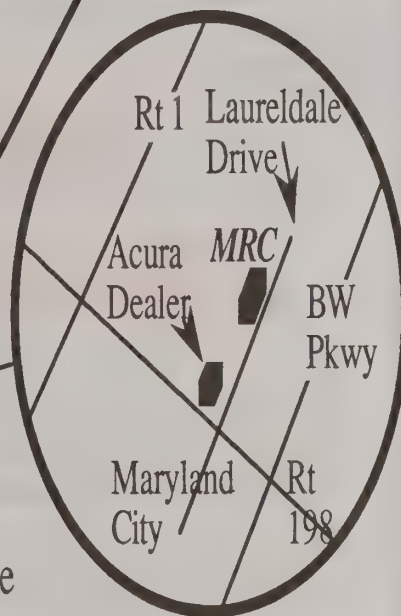
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## Antietam Radio Association

**Meetings:** First and Third Tuesday of the month at 8 p.m. in the Conference Room at the Washington County Regional Airport, Showalter Road, Hagerstown, Maryland.

**Mailing Address:** P.O. Box 52, Hagerstown, MD. 21741

**Nets:** Tuesday 7 p.m. 146.940 MHz.; Wednesday 7 p.m. 447.975 MHz.; Thursday 7 p.m. 147.090 MHz.

**Repeaters:** 147.09+ and 146.94 -.

**Information:** Donnie Sue Mulligan/  
KB3AOO (301) 582-2984

On our first meeting in 1996, January 2, our new ARA President, Bill Harclerode/N8UKC was present and started the year off right. It takes a little while to get into the roll of presidency, but he did a fantastic job. He said he knew we needed help and to call him! He also needs help and thanked all those who have helped him so far.

Charlie Anderson/NF3X had everyone at the meeting on the 16th of January mesmerized by his talk on the "Wild and Wonderful Antennas". It was a good "show-and-tell". Charlie Mulligan/N3MVR then showed us a 2-meter vertical dipole antenna that he had made and put in a plastic sandwich box. Thank you, Charlie A. and Charlie M.

We have some "Water Boys" in ARA. On January 23, after it rained and some of the 43 inches of snow melted, our water system was ruined. Ron Karns called Charlie Anderson. Charlie put Carlo Belella/K3ABH at the Funkstown Fire Department, Charlie Mulligan and Gene Sigler/N3MZB at Halfway Fire Department, Gary Swales/N3VDU at Longmeadow Fire Department to help with whatever was needed and to give water to the community for their use. For those days, we had to full-boil water for a minute out of our spigots to drink, wash dishes, cook. Thanks, guys!

**CONGRATULATIONS!** to Al Brown/WA3FYZ for his appointment to Bulletin Manager by ARRL representing the Maryland-DC Section. Al replaced Bill Dillon/WA3SCW who, after doing a fine job, resigned in December. Al has done a lot for the HAM community: Vice President for Antietam Radio Association in the past, highly involved in the celebration of Hiram Percy Maxim's 125th Birthday when the ARA put a plaque on HPM's grave at Rosehill Cemetery, President of the Itchycoo Park Radio Society, President of the Voice of America Amateur Radio Club, Representative from ARA and the Maryland Emergency Phone Net he has been serving as Executive Vice President of FAR for the last two years, and was coordinator of the giant Gaithersburg Hamfest last September and will have a high profile role in the 1996 version of that event.

Exams were given on January 28, 1996 at the Athletic, Recreation and Community Center at Hagerstown Junior College. Congratulations to all those who took the test, passed and/or upgraded.

Nat DeGutz/W2CXB had a stroke several months ago. Hope he soon gets better...We miss him at the meetings!

Our Hamfest is scheduled for May 5, 1996. Come one, come all to the ARCC at the Hagerstown Junior College, rain or shine, and join in on the fun of the GREAT HAGERSTOWN HAMFEST.

Until next time...73, Donnie Sue/KB3AOO

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## Baltimore Amateur Radio Club

**Meetings:** Meetings: Twice monthly, 7:30 pm at Dulaney High School, Padonia Road, Timonium, Md. - First Wednesday of the month - business meeting, Third Wednesday of the month - program.

**Repeaters:** W3FT/RPTR 146.67(-), 224.24 (-) (no PL) and 449.625(-) (PL 107.2) Note: two meter/220 Mhz. repeaters are linked.

**Club Net:** Every Tuesday night at 8:30 pm on 146.67/224.24.

**NTS Net:** Daily at 6:30 pm on 146.670/224.240

**Club BBS:** (410) 252-6238 (min. 2400 baud)

**Club Voice Mail/Info:** (410) HMTALK

**Hamfests:** Greater Baltimore Hamboree & Computerfest/Maryland State ARRL Convention information: (410) HAM-FEST or (800) HAM-FEST.

**Club Address:** BARC, Inc., P.O. BOX 120, Reisterstown MD 21136

Topmost in our minds here at BARC right now is the Greater Baltimore Hamboree and Computerfest. As this is being written (29 February), the planning and effort the club's Hamboree Committee has put into the GBH&C is paying off in a good turnout of vendors and other sellers for the Hamboree, which is scheduled for 30 and 31 March at the Maryland State Fairgrounds in Timonium. For further information on vendor spaces or tailgating, dial the GBH&C information numbers shown above. To volunteer to help out with the Hamboree, leave a message for Dick, KA3SEK, at mailbox 3735 on the club's voice mail system. Thanks!

BARC is still running foxhunts once a month on an irregular basis. The last foxhunt was on 18 February with Chuck, K3FT, as the fox. This time around Chuck rented a small delivery truck to use as camouflage, parking in a shopping mall parking lot with his radio's antenna inside the truck out of sight. According to Chuck, the hunters zeroed in

on his general location quickly enough, but the number of vehicles and activity in the lot confused the hunters badly enough to delay his discovery for an hour and more. As usual, the club's foxhunts are cooperative in nature, all participants (everyone is welcome!) being encouraged to pool information to more quickly find the hidden transmitter.

Chuck's purpose in this is to develop the skills needed to track down things such as emergency beacons or malicious interference. The next foxhunt will be on a Sunday in March, so keep your radio tuned to the BARC repeater for details.

At our program meeting in January we had Bruce, W3UWV, give a short program on spread spectrum. This was a follow-up to a program given by another speaker, who touched mainly on the regulatory aspects of amateur spread spectrum operations. Bruce put on a fine presentation and was able to explain how such techniques are actually put into practice, drawing block diagrams and giving "layman's" explanations to make his points clear. For our February program, Lee, AA3LN, spent an hour or so covering the accomplishments of the Baltimore Traffic Net, which is one year old on 3 March, and he also explained how BTN fits into the National Traffic System and how traffic flows through NTS, showing how traffic originating with BTN is not simply cast like a message in a bottle into the sea. Thank you, Bruce and Lee, for a pair of good programs.

..... 73 de N3NYC/Hale

### Chapter X



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## Capital City Amateur Radio Society

**Meetings:** 3rd Saturday of each month at 1200 hours at the Woodridge Public Library, 18th and Rhode Island Ave, N.E., Washington, D.C. Visitors welcome.

**Repeater:** W3EIL 144.51/145.11 MHz, open.

**Nets:** Regular net Wednesday at 2000 hrs, RTTY net Thursdays 2100 hrs, voice portion 2145 hrs, all on 145.110.

**Mailing Address:** CCARS, 1719 Franklin Street, N.E. Washington, DC 20018-2033.

**Information:** Steve, W3ETX, (202) 526-1329 or Chester, W3EIL (202) 529-9598.

The CCARS Annual Birthday Dinner Party at the Fort McNair Officer's Club was judged "The Best Yet" by most of those in attendance. It all happened on Saint Valentine's Day, so each YL received an attractively packaged Chocolate Heart presented by their escort. Before the festivities got underway, there was a Moment of Silence in recognition of our Silent Keys. Sharyn Duffin KA3DOF graced the occasion with warm remarks and well wishes from her station in Rockville, MD. Stanley Brown - WB4KIM furnished the music for our listening and dancing pleasure. Thank you Stan for the Oldies but Goodies. Much of this 17th annual event was video taped on a camcorder operated by Ernest Stephens - W3ETX and will be add to many other tapes in the club archives. One of our guest made the following remark, "CCARS is like the Energizer Bunny - It keeps going and going and going". So there is little doubt that we will be involved in this camaraderie next year. Many thanks to Jackson Davis - KB3KI and his committee for a Great Party!!

Spring is here! Plans for the Annual Trip to Atlantic City are being completed. Many of you look forward to the excitement of the Casinos, Strolling the Boardwalk, and your favorite Sea Food Restaurant. More information TBA.

Your early morning commute need not be stressful, join Weaver Shepperson - WB3KIC and others on the "Morning Show". The 511 repeater will, periodically, inform you of the correct time and relay the temperature from its elevation near the U.S. Soldier's Home in Northeast D.C. Drive safely and avoid the (YO YOs). That's a suggestion from Gustavo - KE3NY who will gladly give you the definition of the term (YO YO).

All licensed amateurs are welcome to use the (4) digit access codes on the 145.110 MHz repeater to contact EMERGENCY SERVICES IN THE METRO AREA. Codes are announced on our Wednesday night net.

**SPECIAL NOTICE:** Election of Officers, April 20, 1996.

73 Steve - W3ETX



## Central Maryland Amateur Radio Club

**Meetings:** 4th Friday of the month at 7:30pm, at the Doctors Community Hospital, 8118 Good Luck Road, Lanham, MD (no meeting in December). Enter in the Outpatient Testing entrance across from the Emergency Room entrance behind the main building. Take the elevator to the 5th floor and exit left, the meeting room (DSE Room) is on the right.

**Repeater:** N3EZD/R 145.230 MHz.

**Net:** Every Tuesday, 9:30pm, 145.230 MHz repeater.

**Mailing Address:** Central Maryland Amateur Radio Club, P. O. Box 788, Greenbelt, MD 20768-0788.

**Information:** Oscar Ramsey, Pres - NV3G, (301) 262-3392.

CMARC's involvement in emergency operations was a main item of discussion at its regular February meeting. Members were encouraged to participate in the upcoming NCAC-RACES institute on 4 May. Jim/KD3JA was asked



to write down plans for providing 4-wheel drive vehicle communications for Doctors Community Hospital. The plans would then undergo review and revision at subsequent meetings. Conducting a dry run in the summer was suggested.

Another major item of discussion was CMARC's participation in the Greenbelt Labor Day Festival. CMARC plans to again run a food booth at the Festival, and to provide communication for the parade. Committees were outlined for (1) booth decorations, (2) food, (3) booth scheduling, (4) parade coordination, (5) transit communications and (6) advertisement. A sign-up list was circulated for these committees.

Other items discussed included providing communications for Christmas in April and CROP Walk, and CMARC's participation in Field Day. It was also announced that the repeater trustee, Mike/N3EZD, had purchased a new repeater controller for the club and was in the process of testing it.

73 de Jim/KD3JA



**Dept. of State/  
Voice of America  
Amateur Radio Club**

**Meetings:** 2nd Friday at noon in Room 7139B, Wilbur J. Cohen Building, 330 Independence Ave SW., Washington, DC.

**Repeater:** W3DOS/K3VOA (144.59 MHz Input, 145.19 MHz Output).

**Net:** American Foreign Service Net meets Sundays: 1500 to 1530 UTC on 14316 KHz; 1530 to 1600 UTC on 21416 KHz; 1600 to 1630 UTC on 28416 KHz.

Much continues to be happening this year in the Foreign Service clubs of W3DOS and K3VOA. Furlough and budget questions linger, but communications continue and Embassies fly the U.S. flag around the world.

Congressman David Funderburk, K4TPJ will be our guest speaker at the Seventeenth Annual Foreign Service Amateur Radio Banquet — to be held on Thursday, May 2nd at the Fort Myer Officer Club, cosponsored by the Department of State and Voice of America amateur radio clubs. Other clubs are invited to attend this open amateur radio meeting.

We do not get this opportunity very often, and we look forward to a lot of enjoyment. Congressman Funderburk is one of our strong supporters of amateur radio. Prior to being elected to the U.S House of Representatives from North Carolina, he served as U.S. Ambassador in Europe. He possesses experience in technical and diplomatic challenges which impact all of us.

Families can also have a chance to participate in this wonderful opportunity in a beautiful setting overlooking Washington from historic Fort Myer. Refreshments are available beginning at 6PM. Dinner starts at 7PM. Cost is \$20.00. Reservations should be made through the W3DOS secretary, George Glavis, P.O. Box 5144 Falls Church VA 22044, Tel. (703) 237-4654.

Weekly nets continue to be good in spite of propagation difficulties. Thursday evening 2 Meter communications cover the Washington area, while the overseas conversations take place Sunday mornings. Fellow amateurs wishing to participate are invited to do so. Times and frequencies are listed above.

During the March meeting W3DOS president Jim Walsh gave an impressive APRS demonstration. This Automated Packet Reporting System allows amateurs to geographically locate other stations on a map of whatever size and scale desired. Packet is used for fixed stations. Global Positioning Satellite (GPS) also allows moving targets for mobile communications. W3DOS plans to install a digital repeater (Digipeater) and a beacon soon for ARPS on top of the U.S. Department of State building overlooking the Potomac River near the Lincoln Memorial.





## Digital Mid-Atlantic Radio Council

**Next meeting:** Saturday, April 20th, 1:00 PM,  
Church of the Nativity meeting hall,  
Manchester Drive and Route 5 (first traffic  
light on Rt. 5 south of I-95) Temple Hills, MD.  
Talk-in on 444.5 Mhz and 146.52 Mhz.  
**Address:** P.O. Box 73, Accokeek, MD 20607.

The rapid growth of the amateur digital communications segment of the hobby has caused a number of folks to become frustrated with packet and TCP/IP radio communications over radio due to the amount of congestion and relative "slowness" of the medium when compared to present-day performance of the Internet and other commercial networks. Almost every current packet user checking into the local BBS's has seen messages from ham's saying that we should move our longer haul message forwarding over to the Internet to "speed up" the system.

Regardless of which side you wish to take on this particular discussion topic, the fact remains that we owe it to ourselves to continue using our skills as amateur radio enthusiasts to develop the necessary RADIO paths and links that are required to transport the bulk of our digital traffic. The Internet, used judiciously, is a wonderful tool to supplement our hobby's potential applications but certainly shouldn't be relied upon as the end-all solution to our digital mode congestion and slowness problems.

So what is it that we must do to solve some of these problems? Well, the first thing would be to assess our existing network and determine a strategy to improve the so-called "backbone" links that are necessary to carry the bulk of our keyboard-to-keyboard, BBS forwarding, TCP/IP and, yes, even some limited WWW-style traffic - ham radio related, of course! The next step would be to implement a logical network development scheme

that provides an interim level of improvement in the short term. This will help alleviate the performance problems we are observing right now in getting data passed around the country while establishing the longer term building blocks for much higher data rates in future years. The final, and most difficult, part of this equation is to find enough interested persons who are willing to contribute some of their time and effort to make this all happen. And let's not forget the most important item: MONEY! It's no surprise that it takes a lot of money to acquire the necessary hardware resources to put the network infrastructure together for the benefit of all to use.

The DMARC team is working to try and make that small miracle work here in the local Mid-Atlantic area. Several of your Directors are diligently investigating the myriad array of options with an eye toward determining the best method of implementing a new network concept in this area that will finally allow us to shake the bonds of the (now) outdated 1200 baud systems we are currently using. The goal is to construct a next-generation data handling system that improves the performance of every ham radio digital enthusiast's particular facet of the hobby; whether it be keyboarding, message passing or web browsing. A number of commercial manufacturers are on the verge of introducing high speed backbone products that may make this new RADIO network implementation a lot easier to construct.

The next meeting of DMARC will be on Saturday, April 20th. We plan to discuss some possible network architecture options that could point the way toward a greatly improved digital network in this area. We are finalizing an available meeting site that will be convenient to the maximum number of folks in the DMARC operating area. We will be sending out packet messages and direct mailings shortly with additional details. Please make plans now to attend this meeting - we need YOUR help in deciding how to proceed with this significant endeavor!

73, Pete, WA3UMY, DMARC PIO





## Fauquier Amateur Radio Association

**Meeting:** 7:30 p.m., Second Tuesday of the month except July, August and December. Shadow Lawn Recreation Center, Warrenton VA. Next meeting April 9th. Club dues are payable now.

**Breakfast:** Last Saturday of the month at Western Sizzlin Warrenton VA 7:30 - 9:00 a.m.

**Net:** Every Wednesday, 9:00 p.m., 147.165 Mhz NZ4N Repeater.

**Packet:** KE4YVU FARA7 node 145.070 Mhz with direct connect to FBBS9

FBBS9 Bulletin Board 145.090 Mhz,  
FARA9 node 145.090 Mhz.

**Repeater:** NZ4N/R 147.165 Mhz (+0.600 Mhz)

**Newsletter:** TOROID, Monthly. Deadline for submissions: 20th of the month.

**Information:** Don, WY2V, (540)347-5745 or Larry, K4LLQ (540)347-7609.

**Address:** FARA, PO Box 752, Warrenton VA 22186

The February FARA meeting was packed with activity. The room was packed, the presentation by KC4ROL was packed, and the agenda was packed with business to cover. Larry kicked off the meeting with a quick discussion of the club priorities and interests to get the groups approval and commitment. W4NHJ got roped into the Field Day Coordinator's job in the process! The identified priorities (not in order) were: Voice Repeater, Packet BBS, Newsletter, Phone Patch, Packet Network, Field Day, Holiday Party, Classes, Exam Sessions, Club Auction.

A good discussion ensued on ways to reduce the costs of distributing the club newsletter - Internet publication was one notable idea. Finally, we welcomed three new members to the club: Nancy Woodward, KD6VRK, Sheila Day, KB4USU and Ray Almond W4VOO.

The main presentation was by Will Marchant, KC4ROL. His "What is SAREX" pitch was one of the first showings of what will be a standard AMSAT-NA orientation for schools and groups interested in making SAREX mission contacts. Will is actively involved in the SAREX schools program, helping to make sure the participating schools get their contacts successfully. Will also described the next Shuttle launch and how it can probably be viewed by the naked eye as it flies up the east coast on it's way to orbit March 21st.

Don Maziarz, the ARES Coordinator, passed out a new handbook for ARES members to use in the next call-up. It's an excellent handbook full of good information and the new calling tree.

W4 "Never Fixes Radios" and W4NHJ demonstrated the "Pixie" QRP HF transceiver. It's about 300 mW on a square inch or two of circuit board. The ensuing discussion on the new "Worked all Warrenton Lakes Neighborhood Award" had lots of people interested in building the kit!

73, Mark, KD6AKC



## Green Mountain Repeater Association

**Meetings:** Board of Directors, Last Monday of each month.

**Repeaters:** KD3VR-146.61 (Cheverly), K3GXF-146.88 (Greenbelt).

**Luncheon:** First Saturday of each month at the Fountain Cafe, in the Laurel Shopping Center Mall, US Route 1 (Baltimore Ave.) and Cherry Lane. Starts at 11:30 AM.

**Mailing:** GMRA, P.O. Box 523, Bowie, MD 20715-0523

**Information:** John Williams, N5SJZ, (301) 805-5761.

Spring has sprung! That means it's time for hamfests, kite-flying, and GMRA's Spring



**Membership Drive!** During our Spring Membership Drive, we're inviting new members to join GMRA from now until the end of 1996 for only \$10!

New members will enjoy all GMRA benefits such as autopatch and talking S-meters on both repeaters, personal auto dial slots, and of course our famous monthly luncheon. As an added benefit, we're planning major equipment improvements this year thanks to our growing membership and the kind generosity of our members.

GMRA's monthly luncheons are well attended and enjoyed by all. Members frequently bring spiffy home built equipment, fancy homemade jewelry, and new exotic QSL cards to show and share with the group. (Ask Phyllis, N3JAA if you're wondering about the jewelry).

If you've never made it to a GMRA luncheon, you don't know what you're missing! Our luncheons are very informal, offer plenty of good food and friendship, along with no business discussions or lectures to put you to sleep. What more could you ask for? Well, how about interesting activities?

Have you ever worked HF with a kite-mounted antenna stretching up 500 feet? Ever built a 40-watt, 2-meter amp for half the cost of a commercial amp? How about an interface box that lets you use your cordless phone as a remote mike for your 2-meter or HF rig? Ever worked packet? Been fox-hunting? Built an antenna that outperforms the commercial models? Fine-tuned an antenna with a talking S-meter? Worked the world QRP from a mountain top?

If these activities sound interesting, come to the next GMRA luncheon and visit with folks who enjoy these, and many other activities. This month's luncheon will be on April 13, the second Saturday instead of the first, due to the Easter Holiday. I look forward to seeing you there!

73's from John Williams, N5SJZ



## **Historical Electronics Museum Amateur Radio Club**

**Meetings:** Third Wednesday of each month, 5:30 PM, In the Historical Electronics Museum, West Nursery Road and Elkridge Landing Roads. Linthicum, Maryland (Next to BWI Marriott Hotel).

**Net:** Monday 8:00 PM, 146.67(-)/224.24(-) MHz (courtesy of BARC).

**Information:** Gary Ryan, (410) 969-0410.

**Mail:** P.O. Box 746, Mail Stop 4015, Baltimore, MD 21203.

**Street address:** 1745 W. Nursery Rd., Linthicum, MD 21090.

The February 21, 1996 meeting opened with a status report by Heru Wamsley, W3WV on the HEMARC ATV project. On February 17, 1996 the ATV station made its first complete QSO! The ATV station is now in operation and Heru is ready to train members on its proper operation. The station was made possible by donations from several ham clubs and individuals including: The Baltimore Amateur Radio Club, The Baltimore Radio Amateur Television Society, and John Elgin, WA3MNN. Recently, Warren Hartman, W3JDF donated the 25 amp 12 V power supply and a professional grade TV camera.

Ernie Farkas, K3CBW reported on the status of the TBL-13 project. The transmitter has been moved to enlarge the ham shack area and is being reinstalled. It has passed a smoke test but requires more work before it will be on the air. By next week Ernie will be able to train more operators.

HEMARC has been invited to join a TBL-13 net with a WWII Cruiser and a Submarine both equipped with the indomitable old transmitters. The audio unit requires additional finish restoration and the replacement of some switches to be returned



to top condition. If operating this fine old radio equipment sounds interesting to you, come on over to a meeting or call us.

A class for Novice/Technicians that would like to upgrade to General is scheduled to be conducted by Rol Anders, K3RA at the Museum. Notices have been sent out but it would be appreciated if anyone knowing a likely student would pass the word. It was originally planned for the fall, but the over subscription of a similar class now being held by the Maryland Mobileers in the Museum motivated HEMARC to attempt to fill the need.

The program for the evening was a demonstration of DX packet cluster operation by Rich Boyd, KF3Q. A computer screen display projection on a large screen was used in conjunction with a live 2 meter link to the node. This allowed everyone to follow a very impressive demonstration of the wonderful capability of this form of assistance to active or casual DX'ers. Everything worked flawlessly. Spotting, database, intercommunication and recall capabilities were all shown. The excellence of the system and the demonstration was very much appreciated.

73 de Chip, W4PBG



### **Laurel Amateur Radio Club**

A Volunteer Examiner  
Coordinator

**Meetings:** 4th Wednesday of each month (except November & December) 7:30pm at 384 Main Street, Laurel Md.

**Social:** 2nd Wednesday of each month, except December (Call for directions).

**Nets:** 1st & 3rd & 5th Wednesdays, 8:30pm, on 147.225+, no tone.

**Mail:** P. O. Box 3039, Laurel, MD 20709-0039

**Exams:** 3rd Saturday of each month, to pre-register contact: John/WB3GXW (301) 572-5124 after 6 P.M.

**Information:** Jim/WI3N (301)725-6829 or Pud/W3DQI (301)498-6293.

Our guest speaker for the February meeting was Rich/KE3Q who gave a presentation on the activities of the Potomac Valley Radio Club. Rich gave a lot of encouragement to those interested in DX and contesting. At our next meeting in March the ladies of the Women's Club of Laurel will provide a dinner for the LARC members in appreciation for the work the club members did on refurbishing the Women's Club facility (which is where the LARC monthly meetings are held).

On 18 February, a very cold and windy day, thirteen members provided communications for the President's Day marathon in Beltsville. Matt/N3JMK and HD/N3LFL handled the net control duties. Howard/K3IOG provided mobile assistance to some runners who needed a lift, and the course was well monitored by AA3KW, KD3ZS, N3MIJ, N3TZA, N3TZH, N3WLU, N3MJA, N3LFJ and W3DQI. Colleen/KB0PWW provided communications with the lead vehicle during the race. About 250 runners participated. Our next "public service event" will be on 6 April to support the Dick Howard 10K Health Run in Laurel. Let Pud/W3DQI know if you want to run? or communicate!

On 13 February, Russ/N3AUQ, Jim/WI3N, Pud/W3DQI and yours truly held a small antenna party to assist Red/N3DNH put up a GAP vertical antenna. It went up without a hitch...and it works too! Of course, we kept asking ourselves...why do we do this in February and not in June???? Awww, we like the challenge!

Our regular net meetings on the WB3GXW repeater 147.225 held on the odd Wednesday evenings of the month at 8:30pm continue to have good participation. About 12-14 check-ins are the average. Each net provides an opportunity for check-ins to pass along any items for the general information of the members and to pick up news about the LARC meetings and activities. All are welcomed to join the net!

73 de Roger/N3MIJ





## The Maryland Apple Dumping Radio Amateur Society, Inc.

**Meetings:** 2nd and 4th Thursdays - 7:00 P.M.  
NBC Building - WKYS Conference Room,  
4001 Nebraska Avenue, Washington, DC.

**Nets:** 1st and 3rd Thursdays at 9:00 P.M. on  
145.45 MHz (PL-5A).

**Repeaters:** 444.100/449.100 MHz (PL-2A),  
145.45/144.85 MHz (PL-5A).

**WWW Address:** <http://mvhsl.mbhs.edu/~fwright/MADRAS.html>

**Mailing:** P. O. Box 2468, Wheaton, MD 20902

**Information:** Larry Ziecheck - N3GKZ (301) 984-6113, Jean Blacik N3PLC (301) 984-6113.

MADRAS extends its thanks to Michele Cimbala WK3X, for her presentation of "The Various Roles Ham Radio Operators Played During the Blizzard of '96". Michele spent five or six days at the Montgomery County RACES headquarters during that unforgettable snow fall and was able to give us a blow by blow description of how hams were of service throughout the county. We'd also like to thank those hundred or so hams who volunteered their time and vehicles to RACES and ARES in order to deliver doctors, nurses, and patients to hospitals and clinics.

The MADRAS Clubhouse in Rockville, Maryland was the setting for our second meeting in February. We were fortunate to have two of our own members, Leo Boberschmidt KA3TGY and Bob Price N3NNQ, give a demonstration on "Packet DX'ing". We had a great member turnout for the event and enjoyed pizza and soda before the presentation.

Our non-meeting Thursday net at 9:00 P.M. is drawing more and more check-ins. Thanks, Quin N3KGM, for your suburb job as net control. We all appreciate your dedication to MADRAS and its members.

Our Special Events committee is hard at work lining up various sites for this year. We will keep you informed of their progress as soon as we get word that everything is approved. We have some exciting plans for the remainder of the year and are looking forward for these events to come to fruition.

See you all at the next meeting.

HAPPY EASTER. 73's .... Jean N3PLC



## Metrovision Amateur TV Club

Fast Scan Color ATV

**Meetings:** Quarterly: Time and place TBD.

**Repeater:** WA9GVK/4 (video/audio) Input: 425-431 Mhz. Output: 438-444 Mhz. Accessible 144.970 Simplex FM Voice.

**On-the-air:** Sundays and Wed. 8:00 P.M.

**Mailing:** Metrovision, Inc., P.O. Box 8231, Falls Church, Va., 22041.

**Information:** Sam - N3GHY (301 430-3373)

Jim - KA4CKI (703494~342)

Tom - KO40X (540-752-2100)

Rich - KA3BTD (301-843-1253)

There are many kinds of ATV equipment available on the market. Some of us here on Metrovision use the P.C. Electronics TC-70 - 1 or TC 70 - 10 transceiver or the Wyman Research ATV product line. Communications Concepts Inc (CCI) carries some ATV equipment and I had good success with the 900 MHz down converter in kit form. In the December QST, High Frequency Technology offers complete ATV systems. The ARRL Hand Book will assist you in ATV lingo and offers good background information. ATV Quarterly magazine is an excellent source for ATV equipment, projects and great articles.

Our nets have been going strong each week and best of all we have a lot of fun doing them. Gerald - KB4QGJ or Jim - KA4CKI are net control



coordinators. Both Gerald and Jim always have P5 pictures with blazing color. Skeeter - WA3UDY keeps telling us he going to fix his ATV antenna. Hopefully this is the year he is able to get his ATV antenna problem resolved. Dave - W3PJM and his wife Ruth - K3AGR are the "old timers" on ATV. Dave & Ruth have a tall tower in their yard and Dave plans on climbing the tower to get the ATV antenna repositioned. The same for Sam - N3GHY, only Sam needs some get up and go to get the job done. With all these up coming antenna improvements we should get some dynamite pictures from everyone. Speaking of antennas, Metrovision is horizontal polarized except for 910.250, it remains vertical.

If you are able to receive our video signal we would like to hear from you. We would like to know what equipment you are using, how far from the repeater you are, and what signal strength picture you are getting for the repeater. Please contact us on the above telephone numbers.

My plans are to go to Dayton, Ohio Hamvention this May and look around for some ATV gear, and of course those "great bargains". I plan to visit some of the ATV vendors and see what's new (besides the prices). If you are interested in ATV we can be reached on 144.970 simplex every Wednesday and Sunday at 8 pm.

I'll be "seeing you" 73's Rich - KA3BTD

THE MID-ATLANTIC  
DX & REPEATER ASSOCIATION

## The Mid-Atlantic DX and Repeater Association

**Meetings:** Second Thursday of each month, rotating locations among Hagerstown MD, Frederick MD, Martinsburg WV and Greencastle PA. Next meeting is Thursday, March 14, 1996, at Subway Seafood House in Hagerstown MD.

**Net:** Tuesday evenings at 1930 local on 147.06.

**On the Air:** Tuesdays @ 1930 local on 147.06 RPT.

**Repeaters:** Frederick MD: 147.06, 224.20, 448.125; Martinsburg WV: 147.345.

**Mailing:** 230 North Potomac St., Suite 2A, Hagerstown MD 21740

**Information:** Voice BBS 301-416-8447 (info Box 112) LandLine BBS (301) 416-8435

As we slough off the cocoons of winter, springtime activities start to bring the Hams out among the flowers and songbirds. On the other hand, sometimes we're active in the evenings. One such activity for MADRA will be the General License class starting in Frederick this month. If you want to attend and didn't register in March, be sure to call the telephone BBS and leave your contact info in Box 112. Hal, W3HWC, or Mike,

# KE4TZ

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EX WA3HNW WB4NZE



WB8VBW, will get in touch with you to get you to the right evening, time and place. We expect to be in a Junior High School classroom near Frederick Community College but recording your interest in the voice BBS will ensure that you get the exact info you need to attend.

MADRA members in the Martinsburg area are forming up into a good, strong group. They've been having monthly meetings since February. Bob, KB8HB, pulled together and fielded a six-op team to provide comm support to the Red Cross shelter operation during the snowstorm and flooding weather emergencies in January and February. West Virginia ARES has picked up some super auxiliary supporters.

With a swap of equipment from the WB8VBW shack, MADRA has acquired ownership of a GE Master II repeater system with an ACC controller. The controller was quickly shifted into service at the 147.06(+) location near Frederick MD (thanks Mike!). Near term system expansion plans are targeted toward a site between Ocean City and Salisbury in Maryland.

Tim, N3VNG, and Chris, N3TIK, have been working with Mike on adding new features to the 147.06 repeater. We now have capability to turn on autopatch links for either Frederick or Washington Counties in Maryland via that frequency. Soon to follow, perhaps by the time you read this, are similar capabilities for the 220 and 440 repeaters at the same site.

We have our new club call, KB3BMY. This is just an interim step until we can get KA3SDM assigned to the club in memory of Jim Cameron. Jim's fortune, the last years of his life, and, frankly, a good portion of his sacred honor were committed to this club. We intend to see to it that as large a number of people in this world as possible know of our debt to him - and his commitment to the highest ideals of amateur radio.

Please be sure to mark your calendars for the April meeting: This time it will be at Roy's Place

in Gaithersburg on Thursday, April 11, at 7 PM. Also, mark your calendars for SweatFest96. We expect to be back at the same location in downtown Brunswick MD on July 28.



## Mount Vernon Amateur Radio Club

**Meetings:** Second Thursday of each month, 7:30 p.m. (except December) Mt. Vernon Governmental Center 2511 Parker's Lane, Alexandria, VA 22308.

**Nets:** Every Tuesday at 9:00 p.m. Starts on 2 meters then moves to 10 meters on 28.408.

**Repeater:** WD4PDP 146.055 input / 146.655 output.

**Mailing:** Mt. Vernon Amateur Radio Club (MVARC) c/o Joe Salemi KR4CZ, P.O. Box 7234, Alexandria, VA 22307.

**Information:** John KI4HK, (703) 780-2882 or Julie KD4WSZ, (703) 799-9466 or Packet 145.650 KD4LST-1.

MVARC held its annual Special Event Station Operation during the weekend of February 17 & 18, celebrating George Washington's birthday. A multi-band station was set up in the greenhouse on the Mount Vernon estate using both voice and CW.

Original plans called for a packet station and message center to be set up in a tent near the main gate, but the very cold temperature canceled that activity. Members of the club-sponsored Explorer Post 80 participated in antenna erection and station activation. Some DX was worked and those stations confirming QSOs during the event will receive a special QSL certificate.

Several members continued the ham activity over the holiday weekend by providing support to the President's Day parade in Alexandria. The MVARC repeater was used as the main communications link during the event.



The Club secured a table at the Hamfest in Vienna. A new committee, chaired by Chris, KD4LST will oversee club table operations at future hamfests.

Mike, KE4ER continues to mend after recent hospitalization. Everyone wishes him a speedy recovery and a return to the ham bands.

Some noise has been noticed on the 146.655 repeater. A possible source is slight damage from recent winds and icing. The antenna will be inspected when the weather gets a little nicer.

The inclement weather also delayed the modification of the Coast Guard MARS station. Equipment has been moved to the new shack, but when the log periodic antenna was taken down and inspected, a crack was found in the boom. Replacement parts are expected in during March.

The weather delayed completion of the trench digging for transmission line re-routing. At the end of February the soil around the antenna tower was still too soft to support the crane needed to complete the refurbishing. Lt. Rick David, WC4Q hopes the station will resume operation with MVARC member support in March.

The MVARC license testing will temporarily move to a new location while the main building at Lee District park is renovated. Watch *AutoCall* and listen to the Club net on the repeater, Tuesdays at 9 PM local time, for the most current information. Current plans call for changes beginning around June.

Attendance at the Club's monthly breakfast continues to grow and could cause a change in the restaurant selection. More updated information will be presented at the Club meeting, in the newsletter and on the Net.

73, Chuck, W3HSW



## National Capitol DX Association

**Meetings:** Feb, Apr, Jun, Oct and Dec. at a member's home. Contact the Secretary (Rick Murphy, WA1SPT) for details.

**On-the-air:** Every Sunday at 8:30 PM on the 147.000(-) Ashton MD repeater.

**Information:** Jeff Strandberg-WV3B 301/587-3396-and [ww3b@cispubs.com](mailto:ww3b@cispubs.com), Rick Murphy-WA1SPT 703/280-2637 [rick@trusted.com](mailto:rick@trusted.com), or Leo Boberschmidt-KA3TGY 301/946-3738. Check the DXPacketCluster for additional information or to contact an individual Member.

The February meeting, hosted most graciously by Dave and Marlene Hammond, was one of the most heavily attended in years. NCDXA was fortunate to have Denis-WD4KXB and Ed-KJ4VG present a video and a wrap-up discussion of their participation in the VP2MFM contest effort, with a lively recount of the trials and tribulations of DXpedition logistics and planning.

In addition to several other guests, NCDXA was pleasantly surprised to have Hrane-YT1AD and Dragan-Z32AU attend this meeting and dinner. These two active DXers and contesters were en route from Europe (via a weekend excursion through New York and Washington) to the QTH of V26AS for an upcoming contest. Many of us worked Hrane as 3V8BB within the past year, and his line of business takes him to many pleasant (and rare) DX countries.

NCDXA also welcomes Ed-N3UMA and Yuki-KE3KL/JH1NBN as full members of NCDXA, a 100% ARRL-affiliated club. While Ben continues to amaze his peers with tales of loading up his chimney flue on 40 meters to combat antenna covenants, Yuki brings to the club his experience "from the other side" of the pile-up in such far-flung spots as V6-Micronesia and T2-



Tuvalu. Moreover, belated congratulations are in order to Jack-K4VV for gaining access to the lower 25 KCs of 15 and 20 meters after passing his Amateur Extra class examination the same day as the NCDXA meeting.

The next meeting will be held April 20th at my QTH (WV3B); at the risk of finding he will check in again on 14.260, I hope to have one of our Members tell us about FAIRS and its efforts to bring Amateur Radio to some of the needier parts of the globe. As always, guests are welcome!

Many of you have received a plea for donations to the Kermadec Island DXpedition. As a reminder, NCDXA will match Members' contributions to the SGI/Kermadec project up to an aggregate \$200 level if you forward your check to WV3B.

Happy hunting es CU on the air de WV3B



### Northern Virginia FM Association

**Meetings:** Fall, Winter & Spring

**Weekly Nets:** NVFMA, Wed, 8 PM, 146.79-  
ARES, Sun, 9 PM, 146.91. Equipment Clinic,  
1st Wed of the month, 7:30 PM, 146.79.

**Repeaters:** 52.37/53.37, 146.19/146.79,  
146.31/146.91, 222.50/224.10 Xlink, 222.74/  
224.34, 449.75/444.75, 1272.1/1292.1.

**Membership Info:** Ann Herlich/KD4GSU,  
(703) 481-1458.

**Mailing Address:** NVFMA, P.O. Box 486,  
McLean, VA 22101.

**ELECTION RESULTS** at the 2122196 Board of Directors Meeting are: President, Rick Van Doren, KB4NRU, Vice President, Mike Ryan, KB4CVL.

Thanks and appreciation to our Past President, Mike Ryan, KB4CVL, for his many years of dedicated service, countless hours and work on

behalf of NVFMA. Many Thanks Mike!!!

**GENERAL MEMBERSHIP MEETING** planned for 13 June 1996, will be held at the WNVT Channel 56 TV station located in Merrifield, VA. This is at the very tall tower near the intersection of Lee Highway and Gallows Road. The alternate meeting date will be the 20th of June '96. Check in on the Wednesday night 8 PM Bulletins on 146.79 MHz for updated information. Following the business meeting, we will tour their studios and other facilities.

WNVT folks allow us use of their tower and building at Independent Hill, VA. for our remote repeater equipment. We can show our appreciation by helping them during their upcoming fund-raising telethon. Please volunteer to serve as telephone operators during their telethon coming up soon. Details to be given on the Bulletin!

**SILENT KEYS:** It is with regret and sorrow to report the loss of friends and members of NVFMA, namely,

George W. Garand, WA4CGU  
Robert D. Edsall, WM5C

As you may recall, George gave us band conditions and propagation reports during the Wednesday Bulletins. Bob, recently elected to the Board of Directors, participated in the FM Clinics given the first Wednesday of each month prior to the Bulletin. These very pleasant and cordial gentlemen will be missed but not forgotten.

73, Ann, KD4GSU, Secretary



Reminder - all submissions for

**AUTO CALL**

are due no later than  
the 1st of the  
month prior to the month of publication!!





## Prince George's Wireless Association

**Meetings:** First working Tuesday of each month, 7:30 PM; American Red Cross bldg., 6206 Belcrest Rd, Hyattsville, MD 20782

**Club Station:** K3CEZ

**Mailing:** 4109 Kennedy St., Hyattsville, MD 20781

**Information:** Frank Holton - WA3ZMW  
(301) 927-1245

PGWA held it's regular monthly meeting on Tuesday, February 6, 1996 with 60% of membership attending. Frank, WA3ZMW was the presiding officer.

After the usual business routine of the meeting, some club activities were discussed. First of the events on the list, was the Annual "Crop Walk" which is usually held on the first Sunday in May at The First United Methodist Church in Hyattsville, MD.

During the Crop Walk for Hunger, which helps people throughout the World, PGWA acts as communicators in case of Emergencies. Members are stationed in strategic spots throughout the walking and jogging courses.

Field Day in the month of June is always a challenge that our Club looks forward to. Dave, WB3KXL, usually spearheads this event for our club. Dave has some good ideas about setting up rigs, antennas and a packet station. We also expect to run a (SET) Simulated Emergency Test under Red Cross supervision.

Dave, WB3KXL brought a video tape which was shown at our last meeting. The tape was an old favorite, "Empire of the Air, the Men Who Made Radio." This next meeting in March, Frank, WA3ZMW will show the "Great Train Ride Through the Canadian Rockies." We invite visitors. Please come.



## Southern Maryland Amateur Radio Club

**Meetings:** 2nd Friday of each month at 1930 ET at the PG County Police, Clinton Station, 6707 Groverton Drive, Clinton, Maryland.

**Nets:** Tuesday at 2000 on 147.15+ Repeater; Wednesday at 2000 on 1.865 (+QRM); Thursday at 2000 on 28.447 USB.

**Repeater:** WA3YUV/R 147.15+, Cheltenham, Md. Autopatch to 911.

**Mailing Address:** P.O. Box 273, Cheltenham, Md, 20623

**Information:** Vic (WA3YUV) & Linda (KA3VNI), (301) 888-1388

Greetings to all our fellow snow survivors. This has really been quite a winter. Let's hope that it is finally behind us, but this is Washington and you can never really tell. Just when we get through the challenges of winter we are faced with the next natural disaster, the IRS. I wonder how we can claim our significant financial support of the utility companies this past year?

Now that you have finally found your driveway, dug out the old lawnmower and spreader, and fixed all the antenna damage caused by all the cold and snow, you can safely attend the SMARC meetings again. April promises to be interesting with Tom, WA3TAI (Mr. Packet), demonstrates and explains everything you need to know about Packet Radio. This promises to be a really interesting discussion of this growing aspect of Amateur Radio.

During April SMARC has planned assisting at several public service events. As we have done in the past, the MS Walkathon and the March of Dimes Walkathon will need as much help as we can give them. Also mark your calendars for April 27th when we again help the Christmas in April program, a very worthwhile event where volunteers fix up the homes of those less fortunate than us.



Once again George, KA3KIF, will be coordinating the Christmas in April program for SMARC. Let's all support these activities as we have in the past. Let any of the directors know of your interest. Don't forget that information will also be given out on the weekly net.

As if you didn't know, the repeater has had its problems lately. We are still trying to find a permanent location for the repeater after having the tower it was formally located on removed by the Navy. You would have thought that having relocated the machine that the gremlin would have gone away. Nope, he followed us to the temporary site. Mike, N3RWF, along with a Motorola qualified technician took the repeater and have performed a complete technical overhaul. The controller has been remounted, shielded cables installed, solder joints redone, and a total PM performed. Hopefully this will chase the gremlin away. Don't give up hope, the repeater will be back soon. In the meantime, don't forget to use PL to access the machine.

Just a reminder to all members interested in attending the Board of Directors' meetings, they now meet at 1830, just before the scheduled club meetings. Everyone is invited and encouraged to attend.

And that is the big news from southern Maryland. Enjoy the nice weather, be careful, and we will see you next month.

73, Greg - WA3FSC



## St. Mary's County Amateur Radio Association

**Meetings:** Fourth Thursday of each month, 7:30 PM, at the Lexington Park library

**Repeater:** K3HKL (146.64 MHz)

**Packet:** K3HKL.#SOMD.MD.USA.NOAM (145.75/145.01/223.58/440.975 MHz)

**Lunch Bunch:** Every Friday, listen on the 146.64 MHz repeater between 10-11:30 AM to find out where to meet

**Nets:** - "St. Mary's ARES", every Monday at 7:30 PM on 146.64 MHz - "Bottom County", every Tuesday at 7:30 PM on 146.64 MHz

**Address:** SMCARA, P.O. Box 743, California, Maryland 20619

**Newsletters:** Complimentary copies are available at local Radio Shack stores

The 1996 St. Mary's County Amateur Radio Association (SMCARA) "Winter Dinner" is now history and the Officers of the Association would like to thank everyone that participated.

The banquet was held at the Aloha Restaurant in the Wildewood Center in California, Maryland on Saturday evening, 10 February 1996. An excellent dinner was served family style and capped off with a traditional Chinese fortune cookie ice cream dessert.

Kudos' to Tom Clarke (W4OKW) for taking the time to arrange and organize the event. Although Tom and his wife Kae couldn't attend themselves due to other last-minute commitments, the 34 folks who did go really enjoyed the camaraderie and fellowship of the evening.

The big surprise of the evening was the awarding of a beautiful plaque to Garner Hayden (WA3ELE) to acknowledge his completion of 30 YEARS as treasurer of the organization. The plaque included the distinctive new association seal



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and appropriate wording on an etched brass plate affixed to an oak wooden base.

SMCARA President, B.J. Drury (N3RVX) toasted Garner for his contributions and assistance to the SMCARA over the years. We all hope that Garner enjoys this award as much as the club membership appreciates his many years of dedicated volunteer service.

In addition, 4 door prizes were awarded in a random drawing of tickets and the following lucky persons went home with nice gifts:

- Todd Coe (KB3AMR) won a one-year subscription to *Auto Call* magazine courtesy of the SMCARA.
- Roger Chandler (N3AGJ) won a 1995 SAM's computerized callbook program (on diskettes).
- Waymond Detwiler (N3VIV) won a copy of the brand-new "FCC Rule Book" from the ARRL.
- Lance Blevins (KB3BFY) won the GRAND PRIZE: a copy of the newly published "ARRL Operating Guide" - an excellent compilation of just about everything an amateur radio operator would want to have at his/her fingertips with regard to operating a modern ham radio station.

Congratulations to our honored guest and all our prize winners during this, our first of several club gatherings this year as we celebrate the 40th Anniversary of the founding of the SMCARA!

This should be a banner year for the organization and the Winter Dinner is only the beginning. Stay tuned for details on all of the upcoming plans/events scheduled for this year as we count down towards our 50th year!

73, Pete Butt (WA3UMY),  
SMCARA Secretary/PIO



## The Middle Atlantic FM and Repeater Council, Inc.

**Meetings:** Coordinating Committee (CC) normally meets the last Monday of each month, 19:30, in the OEP conference room of the Prince George's County Emergency Operations Center off Central Avenue. Talk-in on 147.18.

**Address:** P.O. Box 1022, Savage, Md. 20763-1022 for all correspondence.

Coordination for a proposed new 146.610 repeater south of Romney, WV, was issued to WB8FZP; a new 448.225 repeater at Harrington, Del. to N3KCA; and a frequency change of N4RAG's 224.88 machine near Front Royal, Va. to 224.36. A new UHF link was coordinated for the White Oak, Md. 147.18 repeater. Two closed, private repeaters were coordinated, but will not be listed in the Directory at the request of the sponsor. Several notices of proposed new repeaters were received from our adjacent coordinators in Pa., Va. and WV. A review of them all indicated that with the exception of one proposal in western Va., they all appear to be compatible with repeater operations in our area. Several other new links, and a couple of minor changes to existing local repeaters were also coordinated. Our ombudsman, K3LFO, is in the process of verifying several repeaters which have been reported to be off the air.

Here's the next question about coordination: "What other kinds of activities, besides coordination, do coordinators participate in?" Many coordinators are actively involved in "band planning" (or "spectrum management") efforts, often in association with their adjacent-area coordinators, other special-interest groups, or the ARRL's Spectrum, Digital Advisory, and Membership Services Committees. The different special interest groups include the packet community, the DXCluster community, weak signal/SSB/CW ops, FM simplexers, ATV'ers, etc.



All of these other interest groups need to be considered when the "gentleman's agreement" "band plans" are being developed or revised, so frequency coordinators need to keep them all in mind as they conduct their spectrum management efforts. Band-planning/spectrum management cannot be done in a vacuum! Good familiarity with the FCC Rules is helpful here, since repeater, remote-control, link and "remote-base" operation is prohibited in some parts of the Amateur HF, VHF and UHF bands.

Many coordinators also maintain lists of technical experts who are available to assist repeater sponsors in resolving technical problems. They also maintain a list of Amateurs with the capability and expertise in finding interference sources, both from spurious emissions, as well as malicious types. And many coordinators maintain, or have access to, a fairly extensive library of technical information on equipment, system designs, and maintenance. These resources are all available to the sponsors of all coordinated repeaters within the coordinator's area.

Here is the current band plan for the 420-450 MHz band:

420.0 -425.0 Misc. repeater, control and link operations.

425.0 - 431.0 ATV

430.0 - 431.0 Digital (100 kHz wide-band channels centered at 430.05.

430.15, 430.25, 430.35, 430.45, 430.55, 430.65, 430.85, 430.95 [excludes 430.75]) 431.025 - 431.10 Digital (Four 25 kHz-spaced channels).

432.0 - 433.0 CW, SSB, Beacons, etc. (NO FM, digital, repeater or link operation).

433.0 - 435.0 Repeater control and links.

435.0 - 438.0 Satellites (NO FM, digital, repeater or link operation).

438.0 - 444.0 ATV.

440.0 - 440.9 Repeater control and links.

440.925 - 441.075 Digital (Seven 25 kHz-spaced channels).

441.1 - 441.975 Repeater control and links.

442.0 - 444.975 Repeater inputs and outputs.

(Repeater inputs on ODD 25 kHz channels, i.e., 442.025-in/447.025-out, 444.975-in/449.975-out; Repeater outputs on EVEN 25 kHz channels, i.e., 447.000-in/442.000-out, 449.100-in/444.100-out).

445.0 - 445.9 Repeater control and links.

445.925 - 446.075 Voice simplex - Seven 25 kHz channels (NO repeater, control, link or digital operation).

446.00 National voice simplex frequency.

446.1 - 446.975 Repeater control and links.

446.2 Remote-Base intertie.

447.0 - 449.975 Repeater outputs and inputs (See 442.0 - 444.975).

(Channelized operations use 25 kHz-spaced channels, 5.0 MHz repeater input/output spacing)

73, Gary, W3DTN, T-MARC PIO



**Vienna  
Wireless  
Society**

**Meeting:** 7:30pm second and fourth Fridays of the month at the Vienna Community Center.

**Nets:** Pow-Wow nightly at 9 pm. on 28.444 MHz

Slow speed code, nightly 8:30 pm on 28.390 MHz. Vienna Emergency Net, Wednesday 7:30 pm 146.085/146.685

**Repeater:** K4HTA 146.085 in/146.685 out

**Information:** Paul, AB4CY, (703) 560-2779

**Mailing:** P.O. Box 418 Vienna, VA. 22183

February ended fairly well in spite of the lousy weather at the start. Our Winterfest enjoyed some really nice weather for a change and we have had no cases of frostbite to report. The turnout at the tailgate section was very good of course but the indoor section suffered for it.

By now our annual Banquet will be history. Our featured guests were Ethel Smith, K4LMB, the former editor of *AutoCall*, and John Kanode, N4MM, the Roanoke Division Director of ARRL.

This month we have a Fox Hunt planned for



the 28th. The Fox will be on 2 meters. If you need more information I'm sure Paul, AB4CY, will be more than happy to fill you in on the details.

Anyone who is interested in packet might want to give our packet node a try. It is VWSGRN and is on 145.73.

Ann Wimmers-KD4KCT



### Washington Area Young Ladies Amateur Radio League

**Meetings:** Rejuvenation Meeting  
Saturday, May 4, 12:30 p.m.  
Easby's Buffet  
Tyson's Corner, VA

### YLS UNITE

That was the headline on a story that appeared in the May, 1940, issue of QST when the Young Ladies Radio League (YLRL) was first formed.

YLRL is still flourishing throughout the world, and we are now inviting the YLs in the greater Washington area to re-unite the Washington Area Young Ladies' Amateur Radio Club. WAYLARC was organized in 1956 and remained active on the local Amateur scene until a couple of years ago. We would like to get the organization going again. There are so many licensed YLs these days, we should be able to have a very large and active organization in this area. We can enjoy getting together in person and learning where we can find each other on the air. We can work together and encourage other women to get into this fabulous service and we can give some compassionate encouragement and assistance to the YL beginners.

If you are a licensed YL or prospective YL, please come to a very informal luncheon meeting

at 12:30 p.m. on Saturday, May 4, at the Easby's Buffet at Tysons Corner, Virginia. There is a very good buffet with all you can eat for \$8.00. That includes \$6 for the buffet plus beverage and tax and tip. There is a separate section where we can meet in reasonable privacy. It is not a separate room but the space is well separated from the main dining area. Easby's is directly across Route 7 from Tyson's Corner shopping mall and immediately off the 495 beltway at exit 10 West. The address is 80531 Leesburg Pike, Vienna, Va. Look for the large sign for Chili's and Easby's. There is a very large parking lot in front of the buildings.

Please come to this meeting and let us know what you would like to see for the future of WAYLARCs. We do need a "head count" for reservation purposes, so please drop us a note or phone (703) 536-8469 at least a week in advance. Write to 2012 Rockingham Street, McLean, VA 22101. You can also send e-mail to 103350,2045. We are looking forward to a fine turn out of YLs at this meeting. We hope you will be there.

Ethel Smith - K4LMB



### Woodbridge Wireless, Inc.

**Meetings:** Second Tuesday of each month at Springwoods and Chaucer, Lake Ridge, VA.  
**Net:** Monday nights at 2000 on 147.24 with 224.78 link repeater on 147.24 MHz, 144.99 MHz simplex PL-100 repeater 444.90 MHz, repeater 224.780 MHz, packet lan on 145.07.  
**Mailing:** PO Box 112, Woodbridge, VA 22194  
**Information:** Jim Stearns, KC4ZHQ (703) 670-3480.

### NICK TIDD, K4EBY SILENT KEY

Once again, it is with deep sorrow that we announce that another WWI member has become a silent key. Nick passed away after losing a battle with cancer. He was a Charter Member of



Woodbridge Wireless, Inc. and an active participant in all of our activities. He has recently retired from the Federal Government and had also recently assumed the duties of SYSOP of the WWI Packet Bulletin Board. Nick, you will be sorely missed by all. Keep us a clear frequency.....73 SK SK

keeps the award for one year. All stations reporting SS Contest scores has a lest 100 contacts and will receive the Woodbridge Wireless, Inc. T-shirt free. As you can see five stations had a "Clean Sweep". It's really neat to Work All States (WAS) in one weekend.

## MONTHLY MEETING

WWI held its regular monthly meeting on Tuesday, 13 November 1995, at the Canterbury Woods Recreation Center in Lake Ridge. Club President, Paul N3DAN called the meeting to order at 7:30pm. A total of 36 members were present.

## CONTESTING

### CW WWI 95 Sweepstakes Claimed Scores:

Operator	QSOs	Mults	Score	Cat
N4LJS	225	62	27,900	SO*
WD4KXB	196	67	26,264	SO
N3DAN	109	38	8,284	SO QRP
AC4XT	101	34	6,868	SO
NJ4F/K8EI	1,240	77	157,696	MO*
"Clean Sweep"				

### Phone WWI 95 Sweepstakes Claimed Scores:

WD4KXB	1,265	77	194,810	SO*
"Clean Sweep"				
KQ4KK	252	73	36,792	SO
AE4DG	213	62	26,412	SO
KR4JU	173	62	21,452	SO
AC4XT	108	77	16,632	SO
"Clean Sweep"				
N4LJS	105	51	10,710	SO
KJ4VG	100	41	8,200	SO
N4SR+Net	501	77	77,154	MO*
"Clean Sweep"				
KC4ZHQ+				
KD4MVG	421	77	64,834	MO
"Clean Sweep"				

\* Possible WWI Contest plaque winners (WWI SS Contest Plaques are awarded to WWI members for highest score in each category of CW/PH) and will be awarded when official scores are published in the QST. These plaques are engraved with each persons name and call. The recipients

## COMMITTEES

**EMERGENCY:** From the President of WWI: "The Club effort to assist the snow emergency for the Potomac Hospital has been nothing short of outstanding. As usual the Club provided a valuable service to the community. For the first time, I stopped by the hospital and was amazed to see how professional the dispatch service was run. My hat is off to the entire crew that assisted in the snow emergency."

**MEMBERSHIP:** WD4KXB, Denis reported on the status of the WWI Membership Roster and data base update. The new roster has been made available in the WWI Newsletter. We have been busy with our annual membership drive which include mailing out an invitation to all hams in the local area who have been past members and newly licensed. Currently there are about 230 members who have paid dues within the last couple of years. Out of that group we have to date received annual dues for about half, 125, members. The mail is still coming in and we hope to meet our goal of 200 paid members this year.

**PROGRAM:** The meeting's presentation was given by Paul KK4HD and Steve NJ4F on a new Windows logging software for the casual and the serious Dxer. A demonstration was given on all the features. Features include: Awards, Contesting, External Data, Import/Export of Logs, Labels, Multiple Logs, Packet, Prefixes files, Previous Contact, QSL Managers, QSO Filters, Radio Control, Reporting Capabilities, Sorting Speed, Summaries and User Interface. Live hands on operation was provided during the break.

**PACKET:** The WWI Packet Station is temporary out of service.



**ACTIVITIES:** Crew Season is Almost Here - WWI will again support the Crew Races held each year at the Occoquan Reservoir, Sandy Run Park. Sandy Run Park is located off of Route 123, Hampton Road, south of Fairfax City, VA. Everyone is invited. There is a small admission fee to get into the park. This is quite an experience if you have never seen Crew Racing. Competitors range from high school in the mid-Atlantic, colleges and universities and the big one will be the High School Regatta National Championship and the High School National Sculling Championship.

Day	Date	Regatta	Notes
Sat	3-30	HS	
Sun	3-31	George Mason U.	
Sat	4-06	HS	
Sat	4-13	HS	
Sat	4-20	HS	
Sat	4-27	HS	
Sun	5-5	George Mason U.	
Fri	5-10	HS	NOVA Heats
Sat	5-11	HS	NOVA Championship
Fri	5-24	HS	National Heats
Sat	5-25	HS	National Championship
Sat	6-1	HS	Natl Sculling Champ.

## VOLUNTEERS:

Many will be shocked to find  
 When the day of judgment nears,  
 That there is a special place in Heaven  
 Set aside for volunteers.  
 Furnished with big recliners,  
 Soft couches and foot stools  
 Where there's no Committee Chairmen,  
 No Board members or special rules.  
 No Wireloose mailings,  
 No races or parades to coordinate.  
 There will be nothing to staple,  
 Not one thing to repair or make.  
 Collecting dues will be outlawed,  
 But a snap of the finger will bring,  
 Band openings and tall towers  
 And rare feasts fit for a King.  
 You ask who will serve these privileged few,  
 And work for all their worth?  
 Why all those who reaped the benefits  
 And NOT ONCE volunteered on Earth.  
 (Modified by denis Catalano - WD4KXB - from a  
 Scout poem by Amy Gavigan.)

73, Jim, KC4ZHQ,

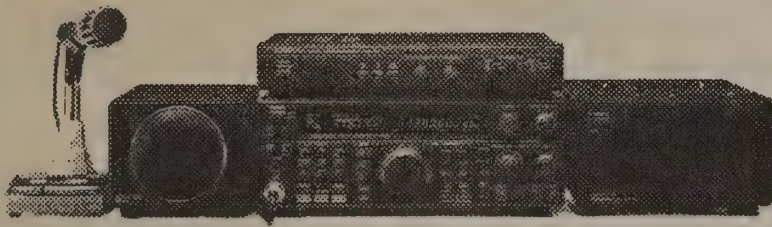
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2/70G RF CONCEPTS 30/20W DUAL BAND AMP	190.00
PV-35R NOVAL 2M AMP	50.00
4-310 RF CONCEPTS 100W 440MHZ AMP	220.00
BRASS RACER IAMBIC VIBROPLEX KEYS	60.00
MFJ401-B ECONO KEYS II	30.00
SP-200 GROVE SOUND ENHANCER	150.00
1000XLT SCANNER	250.00
MODEL SB-152 PORTABLE POWER STATION, 3-6-9-12 VOLT	40.00
PK-96 AEA PACKET CONTROLLER	110.00
DM-1 AEA 2M/220/440 FM DEVIATION METER	120.00
FT-530 YAESU 2M/440 FM HT W/MAN, NC-42, YH-2, FNB-2S, MH29A2B	500.00

FOR INFORMATION CALL GEORGE SAUNDERS, KR4MU PHONE 703-538-4959





Non-commercial advertising of Amateur associated equipment is available to subscribers of *Auto-Call* at the rate of 5 cents per word with a **\$2.00 minimum**. Commercial vendors and non-subscriber rate is 17 cents per word with a \$5.50 (1 inch) minimum. Special headings or special spacing (e.g. one item per line) may be used but such ads will be charged at the column inch rate.

Estate sales for Widows assistance handled by a FAR club will be published without cost.

Your full name and address must be provided with each ad but need not be published. No ads will be accepted over

the telephone and all ads must be prepaid. Ads that will be running for longer than 1 month must be accompanied by a letter stating the length that the ad is to be run. Since no effort is made to investigate advertisers, no warranty can be implied. Copy **MUST** be received by the 1st day of the month prior to the month of publication. Send all commercial and non-commercial advertising and Shack Sales to:

**John Queen, Auto-Call Editor**  
**755 Woodland Way, Owings, MD 20736**  
**(301) 855-0198**

**FOR SALE:** Create CR-30 9"10" roof tower with thrust bearing \$150. Create CLP-5130-2 VHF/UHF log periodic antenna \$75. Yaesu FT-757 Mk II Xcvr with FP-757 P.S. \$675. Ten-Tec Titan Model 425 linear amplifier, export model, \$1800. Drake TR-4310 Transceiver + R-4245 receiver in desktop cabinets (commercial versions of TR-7 and R7. World Radio and TV Handbook called the R-4245 the best receiver it ever reviewed regardless of price) \$1900. KLM 2M-22C (145 MHz) and 435-40CX (435 MHz) Oscar antennas, with three fiberglass poles \$250. Antenna tripod roof mount \$15. 2M 2 element cubical quad, 440 MHz 4 element quad \$15 each. AEA Isotuner new in unopened box with Isooop antenna \$275. Alpha-Delta DX-ULTRA dipole, 80-10 M, used only 2 weeks on DXpedition \$50. Sig, WA9INK, Work/voicemail (703) 875-1776 or (202) 467-0053 home (fax on line - wait for voice pickup). [04/96]

**FOR SALE:** 450 Plus TV tubes NIB with RCA tube rack, \$200.00. Pick-up only. Phone (540) 338-4152. K4LJH. Charles T. Preston, 48 N. Ivandale St., Hamilton, VA 22068. [07/96]

**FOR SALE:** Yaesu FT-840 in excellent condition \$625.00. Ten-Tec Scout with mic, mobile mount, noise blanker, 10m and 2m modules \$450.00. Jim, KS4FZ. 11 Hay Barn Rd. Stafford, VA. (540) 752-1632. [04/06]

**FOR SALE:** Kenwood TS-440S XCVR, excellent condition, with service manual and MB-230 mtg bracket, \$795.00. Heath HW-2036A 2M FM XCVR, good condition, \$70.00. Bill, WA3USW, Falls Church, VA. Phone (703) 241-8141 after 7:00 PM. [04/96]

**WANTED:** For museum - pre 1980 microcomputers - also wanted early sales and microcomputer magazines. KK4WW. (540) 231-6478. P.O. Box 341, Floyd, VA 24091. [03/97]

**FOR SALE:** Cushman spectrum analyzer, CE-2I synthesized receiver 4 MHz to 9.1 MHz. Working w/CE-23 spectrum display not working. Full documentation. \$300.00. Pick-up only. K4LJH, Charles Preston, 48 N Ivandale St., Hamilton, VA 22068. (540) 338-4152. [4/96]



**FOR SALE:** Station For Sale; Mint condition—non-smoker- No-mods. Kenwood TS-940/AT(-purchased new- 1990) with 1st and 2nd IF CW filters- (YG-455c-1 and YK-8&-1) SP-940 Matching Speaker, MC-60A microphone and Heil TX-Footswitch. Package Deal Only — \$1350. Kenwood TL-922A New in 1990, Manual / Box—\$1050. Kenwood Speakers SP-41- \$25 (mint, in box). Kenwood Speaker SP-50- \$35 (mint, in box). AEA MM-3 Morse Machine Keyer Mint, Box, manual \$160. Bencher Paddle/key (Chrome) \$40. Kenwood HC-10 World Clock with manual \$125. Astron RS-35M Mint—\$115. Ameritron RCS-4-4 position automatic antenna switch-\$100. Cushcraft AR-270 Dual band antenna-\$35. 2 Diamond Mag Mounts \$20 each. Comet Dual Band Ant. \$50. Th-77 Dual Band HT with 2nd battery and SM-32 Speaker Mic—\$265. TH-26 VHF HT with 2nd battery and SM-32 Speaker Mic \$165. Diamond RH-77 Extended antenna \$10. Kenwood HMC-2 Headset Mic (Vox) \$35. Mike Whatley, WA4D. Phone (703) 845-5761. [04/96]

**FOR SALE:** QST magazines 1979 to present. Mixed months and years from 1961, Ham Radio Horizons, QST, Popular Mechanics, Science, Electronics, S9, CB Horizon, Illustrated, Lafayette, Heathkit, Radio Shack. Your cheap price or trade for tube AM radios, Zenith, Philco, etc. **WANTED:** Icom FL-101 CW filter will trade my FL-100. Greg, KA3DBG, 4402 Jupiter St., Rockville, MD 20853, (301) 946-6460. [04/95]

**WANTED:** CLEGG FM-28 schematic and instruction manual needed. Will borrow and copy or buy outright. Please call Roger, K3TM, (301) 394-4775 days. [04/96]

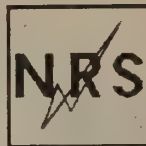
**WANTED:** Kenwood AT-130 tuner, Yaesu FC-102 tuner, Mosley vertical parts antenna. Charles, N3HFO, (301) 552-1251. [04/96]



Reminder - all submissions for



are due no later than the 1st of the month prior to the month of publication!!



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[5/96]

**Mid-Atlantic Radio Club.** Become a part of one of the country's fastest growing vintage radio clubs. The Mid-Atlantic Antique Radio Club is an active group of radio collectors, restorers and historians. For a sample newsletter, write to Jay Kiessling, Mid-Atlantic Antique Radio Club, P.O. Box 67, Upperco, MD 21155. (410) 239-1818.

[SWP]

## **AMATEUR RADIO NEWS SERVICE**

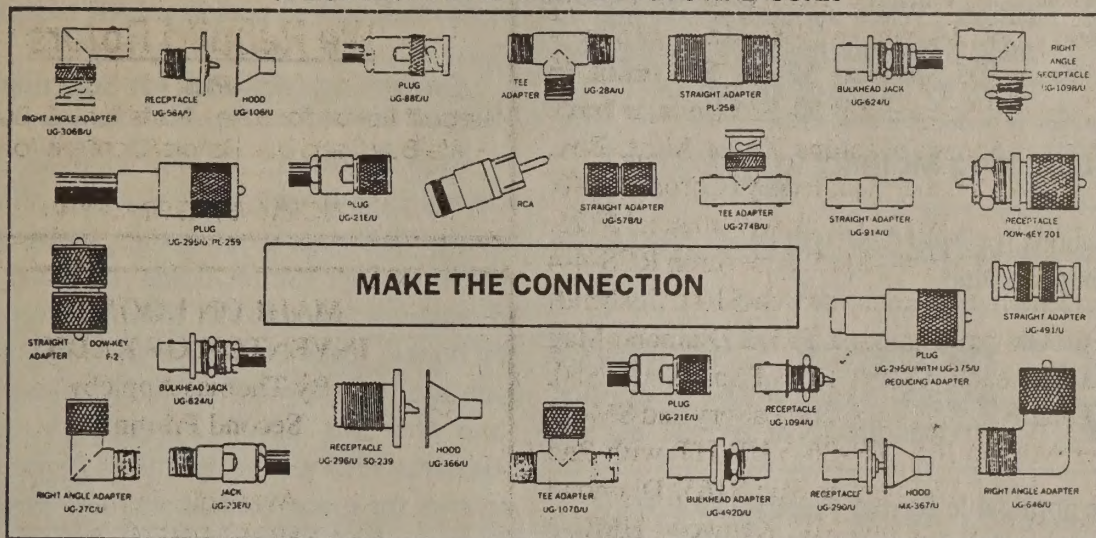
is an organization of publishers and editors of Amateur Radio newsletters and members engaged in public relations. Its purpose is to assist editors in any way possible. For information, write to Lee Knirko, W9MOL, Amateur Radio News Service, 833 Park Plaine, Parke Ridge, IL 60067.

[SWP]



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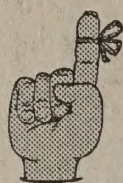
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# Auto Call Production Policy



**Deadline:** The deadline for ALL submissions to *Auto Call* is the 1st day of the month prior to the month of publication. When submitting via regular mail, time your mailing to ensure delivery by the 1st of the month.

## Submitting Material to *Auto Call*

Submissions for *Auto Call* will be accepted in the following formats:



**Electronically:** Submissions are accepted via any of the major on line services directly or over the Internet.

Use the applicable format exactly as follows:

**America On Line** - JohnQueen

**AppleLink** - johnqueen@aol.com@internet#

**BitNet** - johnqueen@aol.com@cunyv

**CompuServe** - INTERNET:johnqueen@aol.com

**Connect** - johnqueen@aol.com

**Delphi** - internet"johnqueen@aol.com"

**FidoNet** - To johnqueen@aol.com<CR><CR>

**GE**nie - johnqueen@aol.com@inet#

**MCI Mail** - mbx: johnqueen@aol.com

**Prodigy** - johnqueen@aol.com



**Regular Mail:** Mail typewritten or computer generated hard copy to: John Queen, Editor, *Auto Call* Magazine, 755 Woodland Way, Owings, MD 20736. Ensure that

your printed material is dark enough for scanning.



**Computer Disk:** Submissions are accepted on 3.5" or 5.25" computer disk, in either Macintosh or MS-DOS format, using Word, WordPerfect, or standard ASCII text files. Write your name, telephone number, and club name on the disk. Submit graphic files (club logos, etc) in an EPS or TIFF format. Please verify the readability of your com-

puter files before sending. If you want your computer disk returned immediately, include a SASE envelope with .32 postage. Otherwise, disks will be returned only in person at FAR meetings.

## Preparing Material for Submission

**Club Columns:** Member clubs are allocated one full page in each issue for club columns. In determining space requirements, figure about 700 words per page not including the space taken up by headings, photos, etc. Indent paragraphs .25" and double space to begin a new paragraph. Send club header information **ONLY** when different from what was published from previous month. The editor reserves the right to edit any submitted material for space, content and/or applicability.

**Hamfests/Events:** Member clubs are allocated one full page per year to promote one club sponsored hamfest, convention, or special event. Submit clean black & white camera ready copy only by mail. Master copy should be in black ink on white paper and should be in proper page ratio, (Copy space is 7" wide by 9" high). Copy can be reduced or enlarged as necessary. Electronic submissions of Hamfest ads will not be accepted.

**Photographs:** The editor will select the best photograph submitted for the cover each month. Photographs should depict club members, club stations, or amateur radio related events that are current and noteworthy. Clubs may also submit photographs for inclusion with their club column. Photographs will be used in columns when space permits. Either B&W or color photos can be used. For each photograph submitted, write your name, phone number, and club name, along with a description of the photograph on a piece of paper, and tape it on the back of the photograph. Do not write on the back of your photo. If you want your photos returned immediately, include a SASE envelope with sufficient postage. Otherwise, photos will be returned only in person at FAR meetings.





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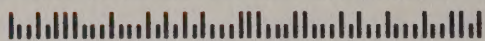
# Area Club Meetings - April 1996

<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
	<b>1</b> DOSARC	<b>2</b> Antietam PG Wireless	<b>3</b> BARC Montgomery	<b>4</b> Anne Arundel	<b>5</b> Mobileers Shenandoah	<b>6</b> Green Mtn.
<b>7</b>	<b>8</b> Carroll Co.	<b>9</b> Fauquier Frederick Woodbridge	<b>10</b> FAR - MD	<b>11</b> MADRAS Mid-Atlantic Mt. Vernon	<b>12</b> VOA Vienna So. Maryland Alexandria	<b>13</b> North Point
<b>14</b>	<b>15</b> OVHA Sterling Park	<b>16</b> Antietam Arlington	<b>17</b> BARC Goodard HEMARC Montgomery	<b>18</b> Anne Arundel	<b>19</b> Shenandoah	<b>20</b> Capital City QCWA 91 NCDXA
<b>21</b>	<b>22</b>	<b>23</b> Columbia	<b>24</b> Moose Laurel Carroll Co.	<b>25</b> MADRAS St. Mary's	<b>26</b> Central MD Vienna	<b>27</b>
<b>28</b> Adventist	<b>29</b> Green Mtn. T-MARC	<b>30</b>	<b>Plan to attend the FAR meeting!</b>			



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